



# The Architecture and Pottery of a Late 3rd Millennium BC Residential Quarter at Tell Hamoukar, Northeastern Syria

## Citation

Colantoni, C., and J. A. Ur. 2011. The Architecture and Pottery of a Late 3rd Millennium BC Residential Quarter at Tell Hamoukar, Northeastern Syria. *Iraq* 73:21-69

## Permanent link

<http://nrs.harvard.edu/urn-3:HUL.InstRepos:5342153>

## Terms of Use

This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA>

## Share Your Story

The Harvard community has made this article openly available.  
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)

# I R A Q

VOLUME LXXIII • 2011

## CONTENTS

Editorial	iii
Obituaries: Dr Donny George Youkhanna, Mrs Rachel Maxwell-Hyslop	v
JASON UR, PHILIP KARSGAARD and JOAN OATES: The spatial dimensions of early Mesopotamian urbanism: The Tell Brak suburban survey, 2003–2006	1
CARLO COLANTONI and JASON UR: The architecture and pottery of a late third-millennium residential quarter at Tell Hamoukar, north-eastern Syria	21
DAVID KERTAI: Kalḫu's palaces of war and peace: Palace architecture at Nimrud in the ninth century BC	71
JOSHUA JEFFERS: Fifth-campaign reliefs in Sennacherib's "Palace Without Rival" at Nineveh	87
M. P. STRECK and N. WASSERMAN: Dialogues and riddles: Three Old Babylonian wisdom texts	117
GRÉGORY CHAMBON and ELEANOR ROBSON: Untouchable or unrepeatable? The upper end of the Old Babylonian metrological systems for capacity and area	127
NICHOLAS POSTGATE: Making tablets or taking tablets? <i>ṭuppa/u šabātu</i> in Assyria	149
URI GABBAY: A fragment of a Sumerian lament: BM 65463, Tablet XI of the <i>balaġ ūru àm-ma-ir-ra-bi</i>	161
JAN KEETMAN: Eine als Ziqqurrat gedeutete Skizze einer Treppenanlage	169
HUGH KENNEDY: Feeding the five hundred thousand: Cities and agriculture in early Islamic Mesopotamia	177
STEPHANIE ROST and ABDULAMIR HAMDANI, with illustrations by STEVEN GEORGE: Traditional dam construction in modern Iraq: A possible analogy for ancient Mesopotamian irrigation practices	201
Abstracts in Arabic	221

PUBLISHED BY THE  
BRITISH INSTITUTE FOR THE STUDY OF IRAQ

(GERTRUDE BELL MEMORIAL)

10 Carlton House Terrace, London SW1Y 5AH

[www.bisi.ac.uk](http://www.bisi.ac.uk)

ISSN 0021-0889

# THE ARCHITECTURE AND POTTERY OF A LATE THIRD-MILLENNIUM RESIDENTIAL QUARTER AT TELL HAMOUKAR, NORTH-EASTERN SYRIA

By CARLO COLANTONI *and* JASON A. UR

The 2001 excavations in Area H on Hamoukar's lower town produced a wealth of information on a residential neighbourhood of a late third-millennium BC city. The excavations were intended to address several issues, including chronology, urban form and the final abandonment of the site. Toward these ends, a broad exposure of over 400 m<sup>2</sup> was opened, revealing a prosperous neighbourhood that had been sacked and abruptly abandoned. This report addresses two aspects, its architecture and ceramic assemblage, in detail. The architecture demonstrates broadly shared principles in spatial patterning and planning, as well as similarities in construction, with variations connected to socioeconomic status. The ceramics represent a snapshot of the assemblage of the late or post-Akkadian period, including many whole or reconstructable forms. Contrary to the expectations of abrupt climatic change models, Hamoukar remained settled and urbanised after the proposed 2200 BC Akkadian collapse, and its abandonment was the result of a sudden and violent military event.

## I. Introduction

In the second half of the third millennium BC, the northern arc of the Fertile Crescent witnessed the growth and development of urban settlements, from Ebla in western Syria to Nineveh on the Iraqi Tigris, and with a particular concentration in the Upper Khabur basin of north-east Syria and the adjacent plains of northern Iraq (see recent reviews in Stein 2004; Ur 2010a: 404–12). Several of these cities were able to consolidate substantial territorial holdings, and alternately allied with and fought against each other in a manner similar to their neighbours in southern Mesopotamia (Archi and Biga 2003; Sallaberger 2007). Many of these cities were abandoned or underwent major restructuring at the end of the millennium, the result either of an abrupt climatic event (Weiss and Courty 1993) or of a process of economic overextension (Wilkinson 1994). Recent research has highlighted variation in the timing and degree of urban collapse (Schwartz 2007; Ur 2010a: 412–13).

At ninety-eight hectares, Hamoukar was one of the largest third-millennium centres. Like many of its urban contemporaries, it grew from a long-settled tell (the high mound), which at Hamoukar originated in the early fourth millennium if not earlier (Gibson *et al.* 2002a, 2002b; Reichel 2009). In the mid-third millennium BC this fifteen-hectare ancient core was surrounded on three sides by a broad lower town (Fig. 1). In the course of the systematic surface collection of the site in 1999 (Ur 2002b, 2010b), the areas of the eastern lower town currently under cultivation were noticed to have a high density of ceramics from the end of the millennium. Of particular interest was the high frequency of a type of comb-incised decoration known to characterise the post-Akkadian ceramic assemblages at Tell Brak and Nineveh (McMahon 1998; Oates *et al.* 2001). These and other sherds were large and exhibited fresh breaks from recent ploughing, which hinted at the possibility that *in situ* assemblages, rather than midden contexts, were immediately beneath the surface. Baked brick fragments had been noted across the entire area of the lower town, but the density was particularly high on the south-eastern fields.

Starting from this point, an extensive excavation of Hamoukar's lower town could address several issues. At the site level, it would provide a critical control on the interpretation of the surface survey results and offer further information on the date of the lower town's abandonment, and possibly on the nature of that abandonment. A horizontal exposure would offer insight into the spatial organisation of a presumed domestic area and the nature of its built environment. If the interpretation of the surface assemblage was correct, the recovery of an *in situ* corpus of late Akkadian or post-Akkadian period pottery would also be possible. In addition, these issues of local settlement structure and chronology would bring Hamoukar into larger debates about the nature of third-millennium BC

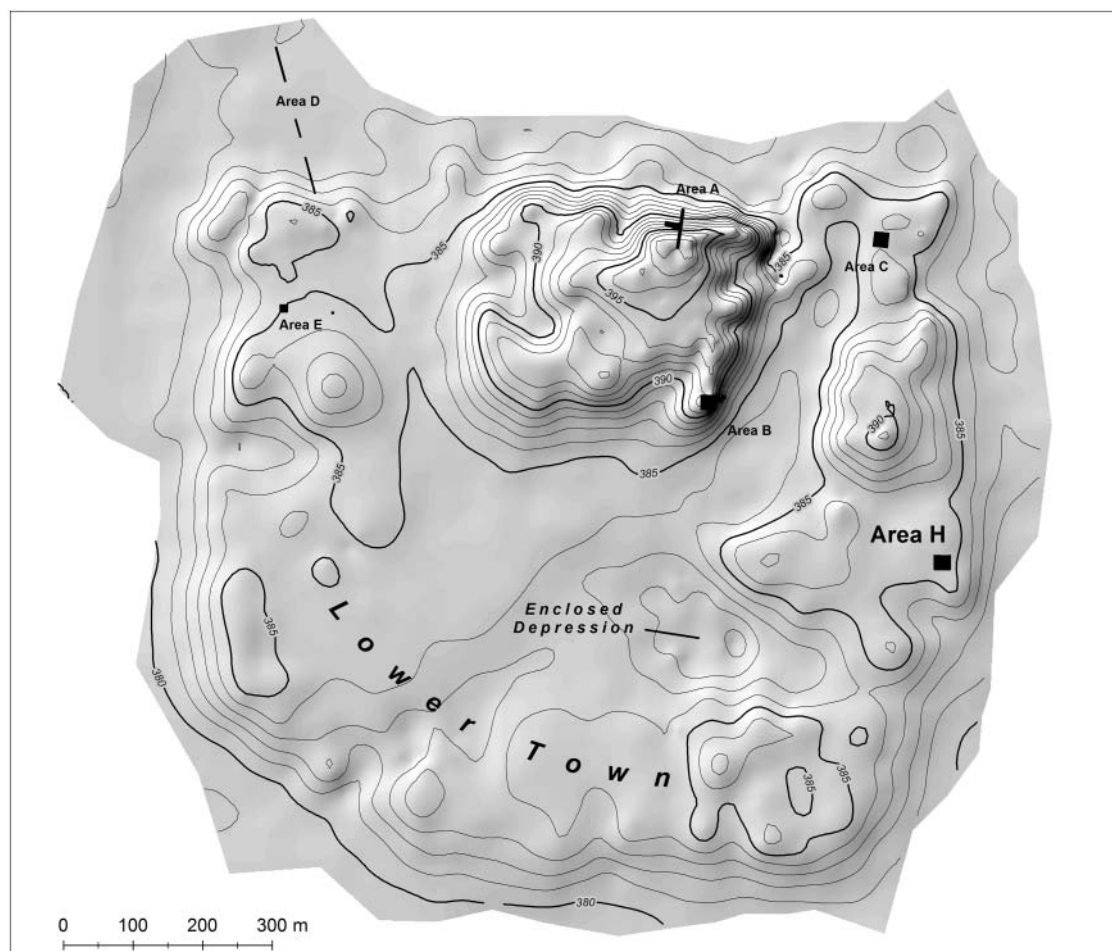


Fig. 1 Topography of Hamoukar, with excavation areas indicated.

urbanism in northern Mesopotamia. Excavations have, with some exceptions (Pfälzner 2001; Matney *et al.* 1999), focused on elite monumental architecture on high mounds; residential excavations might allow us to “re-populate” Hamoukar with more modest groups and to address issues of class, neighbourhood identity, and socio-economic variability through vernacular architecture and associated material culture.

Finally, the wide surface distribution of sherds with comb-incised decoration on the lower town suggested the possibility that extensive settlement at Hamoukar might have persisted well past the proposed abrupt climatic event of 2200 BC that extinguished urban life at Tell Leilan. Hamoukar is only forty-three kilometers from Tell Leilan, and major climatic events would affect both sites equally. If Hamoukar had remained not only settled but still urbanised it would cast serious doubt on the severity of the proposed 2200 BC climatic event.

For these reasons, the Area H excavations were begun during late September and October of 2001.<sup>1</sup> Earlier discussions of the Area H excavations have appeared in preliminary reports (Gibson

<sup>1</sup> Our deepest gratitude goes to the Directorate General of Antiquities and Monuments for the Syrian Arab Republic, particularly Dr Michel al-Maqdissi, the Director of Excavations in Damascus, and Abd al-Massieh Baghdo, the director for Hassake Province. We are thankful to the project's co-directors in the 2001 season, Professor McGuire Gibson (Chicago) and Dr Amr al-Azm (Damascus), for encouraging us to test the results of the surface collection via excavation,

and for entrusting its supervision to us. We were assisted during the excavations by Bashir al-Dakheel and Tarek Ahmed of the University of Damascus; Salam al-Quntar (then of the Syrian Directorate General of Antiquities and Monuments, Damascus) supervised the excavation of Square 6. The architecture was planned by Colantoni and Ur using point proveniences provided by Dr Clemens Reichel; pottery was drawn and inked by Ur, Colantoni and Peggy Sanders.

*et al.* 2002a; Ur 2002a), a doctoral thesis (Colantoni 2005) and as a case study in commensal practices in the later third millennium (Ur and Colantoni 2010). What was found was one of those rare occasions in archaeology, a complete *in situ* cultural assemblage; a neighbourhood abandoned and looted after the sack of the city.

Area H lies in the eastern periphery of the lower town, in the midst of a modern cereal field (Fig. 1). The ground surface sloped downward gently from west to east. The tops of the walls in the eastern half of the area lay twenty centimeters below the ground surface and had been disturbed by intensive recent ploughing. In the western half, surfaces and architecture were sealed by up to 1 metre of sediments that had undergone the process of soil formation. The leaching of the soil by groundwater results in a horizon of calcium carbonate and the associated homogenisation of archaeological layers (see Wilkinson and Tucker 1995: 5–6 and fig. 3). This geomorphological process is indicative of a long period of site abandonment, in the case of Area H since the late third millennium BC.

The area was divided into six squares (H 1–6) covering an area 22.5 m by 19 m and totalling 427.5 m<sup>2</sup>, with a total reconstructable area of more than 435 m<sup>2</sup>. The excavations exposed a single phase of occupation with various sub-phases of modifications visible. In many cases two occupational floors were excavated within the structures, with the repaving of courtyards, the construction of new drains and the laying down of renovated internal occupation floors. All suggest relatively long use-lives of the structures before abandonment. Typical small finds in Area H include shell rings, fragments of zoomorphic clay figurines, fragments of clay sealings, occasional clay tokens and large quantities of complete and restorable ceramic vessels (see Section III below).

The recovered archaeological material points toward the rapid desertion of the site after some catastrophic event, with evidence of looting littered across the entire quarter. Copious quantities of pottery lay deliberately smashed in the courtyards. Very few metal objects or artefacts of worth, however, were recovered in the excavations. It is a scene of apparent wanton destruction, with the contents of the houses gathered and dragged into the daylight of the open courtyards and doorways, searched and then destroyed after the removal of anything of value or easily portable. Reinforcing this interpretation are the finds of semi-articulated parts of at least one human skeleton in two rooms (L.6 and L.15); these unburied remains appear to have scavenged by animals. In sum, Area H provides an invaluable snap-shot of a late third-millennium residential quarter. Similar conditions of preservation in Area C attest to a probable citywide sacking.

## II. *The architecture of the residential quarter*

### *Overview*

The Area H excavations provided a window into a residential quarter of large, well-constructed domestic units of the central-courtyard type with associated activity areas, wells, brick-lined drains and what may have been one of the main thoroughfares of the settlement (Figs. 2–3). From construction, materials and the cultural artefactual assemblage, the area appears to have been a prosperous neighbourhood. Although the quarter had been looted there was no evidence of structural damage to the buildings.

We present here a description of the individual domestic units, a brief comparison of these units with domestic architecture for the period across the region, and a discussion of the spatial arrangements and characteristics of the architecture and built environment in the residential quarter. The importance for northern Mesopotamian archaeology of Area H is that the quarter remained intact as a coherent artefactual and architectural sample of the period. The final phase of the architecture was undamaged, unmodified by later occupation. This sample of housing and its

### <sup>1</sup> *Continued*

We owe a tremendous debt to our superb conservator, Hassan Abdel Ghafour of the Directorate General of Antiquities and Monuments in Damascus, for his skilful pottery restorations and unfailing cheerfulness despite the seemingly endless flow of new vessels. Funding for the Area H excavations was provided by the University of Chicago, the 2000–2001

Mesopotamian Fellowship of the Baghdad Committee of the American Schools of Oriental Research (Ur) and the C. H. W. Johns Memorial Fund of the University of Cambridge (Colantoni).

For this report, Section II (Architecture) was written by Colantoni, Section III (Pottery) by Ur, and Sections I (Introduction) and IV (Conclusions) were jointly authored.



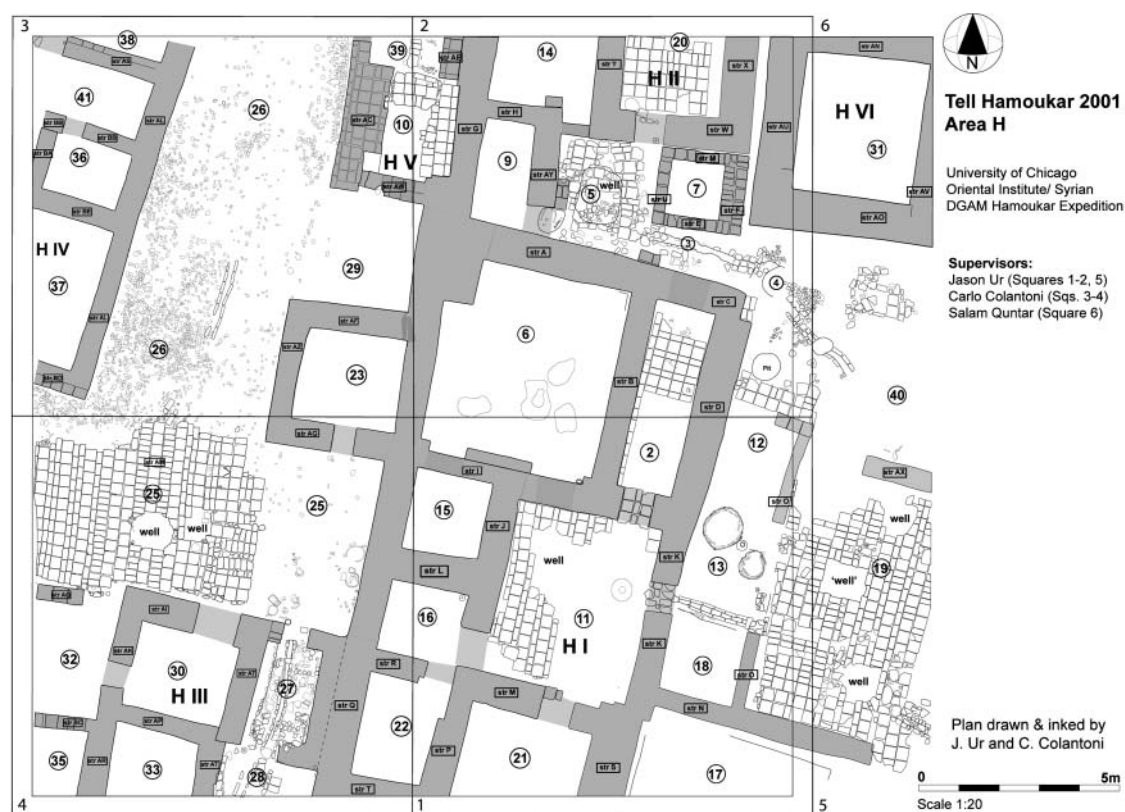


Fig. 2 Plan of Area H.

associated built environment is a particularly fine example of an urban quarter in the late third millennium. In addition, the ground plans, open spaces and artefactual contents furnish possibilities for social analyses.

#### *Architecture and spatial organisation of the quarter*

The quarter consists of six identifiable and separate domestic units (H I–VI). These units are not completely independent (the limited exposure of the units does not allow a complete understanding of their agglomeration) but for simplicity's sake they are treated here as six separate entities. The most complete ground plan is that of H I, which can be deemed an archetype or idealised form of the central-courtyard type of house when compared to the corpus of structures excavated at Hamoukar and across the region in this period (see below).

Both houses H I and H II are organized around an interior unroofed courtyard and have associated large exterior courtyards and activity areas. Public space in the residential quarter is represented by the street L.26 and open semi-public courtyard L.25 to the west, and the open *maidan* or communal area L.40 and alleyway L.3/4 to the east (see Figs. 2–3). The surfaces of these public spaces have light soils embedded with sherds, baked brick fragments, bones and stones typical of frequently used exterior space. The broad street L.26 (Fig. 4) may have been a fairly substantial thoroughfare; it runs NNW–SSW into the large open courtyard L.25 (associated with house H III), and may turn to continue to the west at its southern end.<sup>2</sup> In a similar manner to the other exterior spaces it is covered by an extremely dense carpet of household detritus (bones, sherds, fragments of basalt, kiln slag and

<sup>2</sup> There is equivocal archaeological evidence for the street either continuing westward or ending here in a cul-de-sac. It is proposed here that there is a high possibility that it may have continued as a street as the paved courtyard in this area

had no perimeter wall and the distinctive sherd lens associated with street surface was visible continuing into the western section, implying continued heavy traffic.

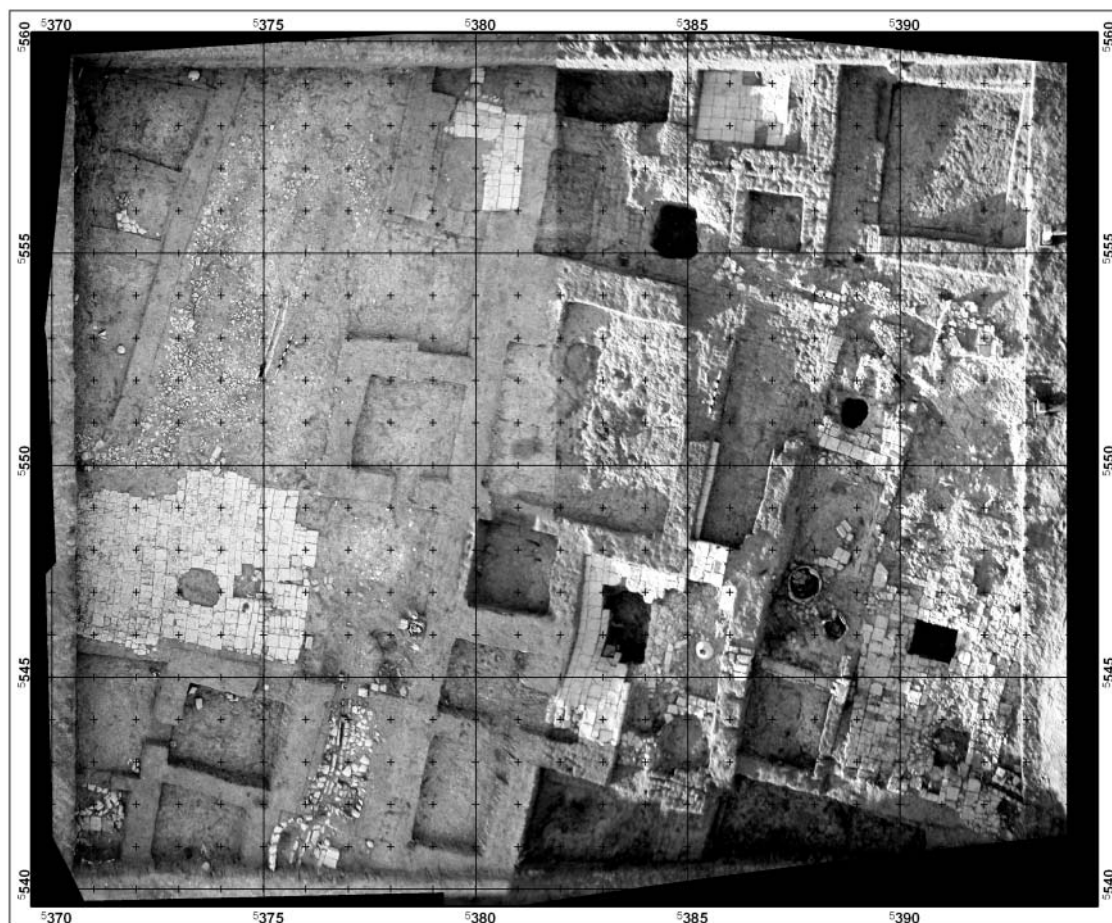


Fig. 3 Mosaic of vertical photographs of Hamoukar Area H.

baked brick) increasing in density towards the peripheries of the street. The creation of this surface involved the dumping of household refuse against the exterior walls of the structures lining the street, in the process protecting the bases of the walls, and the spreading of the material towards its centre. The street is slightly concave with a baked brick drain running along its southern half (emptying the courtyard to the south, L.25; see H III below).

#### *Unit H I (Loci 2, 6, 11, 15, 16, 21 and 22)*

This is the largest and most complete of the domestic units in Area H. It has an enclosed courtyard (L.11) partially paved with complete and well-laid baked bricks and flanked on three sides by rooms (L.6, 15, 16, 22, 21). House H I possesses the distinctive entrance corridor or passageway (L.2) common to central courtyard houses at many sites for the period across the region (see below). Its principal room (L.6) was a reception room. The house represents the only complete domestic unit recovered in the excavations at the site.

The long entrance corridor L.2 was entered from the external passageway L.3/4 and opened into the internal courtyard L.11. The northern half of the corridor, near the house's main entrance, was partially paved in baked brick (full bricks of  $30 \times 30 \times 7$  cm and half bricks of  $30 \times 15 \times 7$  cm), with a row of baked brick stretchers lining and protecting the base of the western wall running up to a baked brick threshold opening into the central, enclosed courtyard L.11. The passageway was presumably roofed, as the southern half has a compact earth surface that is grey-white flecked and fine-textured in a manner typical of the interior surfaces in the area. Although this paving belongs to a later, second sub-phase of modifications to the unit indicating that the entrance was still in use,



Fig. 4 The broad street L.26 at the eastern end of Area H, facing south. Unit H IV is at right.

a second doorway was also constructed to the east of the central courtyard L.11, opening directly on to a pair of walled external courtyards to the south-east (L.12/13/18 and 19). The large courtyard L.19 is paved with regularly laid baked brick and both activity areas contained quantities of *in situ* ceramic vessels.

At 20 m<sup>2</sup>, L.6 is the largest of the house's rooms (Fig. 5). At its centre are traces of an open hearth on the floor. There are a number of architectural features in this room. A long and narrow bench had been constructed in the north-eastern corner (10 cm high and 35 cm wide, i.e. a single plaster-covered brick); a further narrow bench partially runs along the face of the southern wall and in the north-western corner is a large, low protruding platform. The interior walls were covered in a thick layer of mud plaster and a thin finishing coat of fine white plaster. Unusually, the southern corners of the room also have small decorative protrusions or "buttresses". A small basalt stone vessel was found lying in the corner against the south-eastern buttress, where it had been used as an improvised door-socket. A second doorway joins L.6 with the smaller room L.15, an ancillary room to the south, from which fineware beakers were found in the north-western corner. The assemblage of portable material culture from this living area includes a bone awl, many restorable ceramic storage vessels and fineware beakers and various burnishing stones, all pointing toward a multi-functional domestic activity area with a heavy emphasis on communal eating and drinking (Ur and Colantoni 2010).

Further rooms include L.16, the small antechamber between the central courtyard L.11 and room L.22, which had smashed pottery in its doorway to the courtyard. The only objects recovered were pottery and a bone needle, so it is assumed that this was simple domestic living space. To the south of this room is L.22, a medium-sized room with a decorative fine white plaster and a rabbetted doorjamb.

The final room in this unit, L.21, is also probably the second largest. It would have been entered directly from the central courtyard via a partially paved threshold. There are traces of a possible hearth in the north-eastern corner of the room.



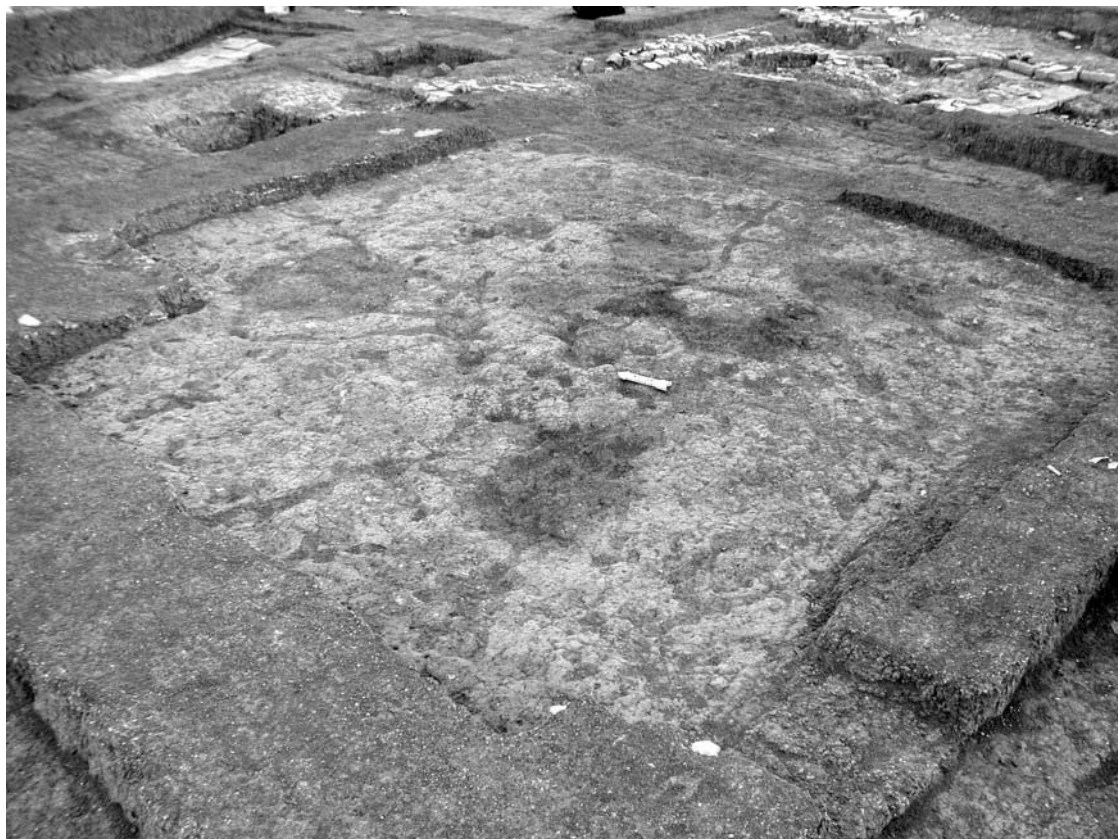


Fig. 5 The reception room L.6 in H I, facing NE.

The central courtyard L.11 acts as the circulatory space between these various rooms. This courtyard is partially paved in its western half with a well-constructed pavement of regularly alternating rows of half-sized and complete baked bricks<sup>3</sup> bounding a centrally placed rectangular well on three sides. The eastern half of the courtyard is an exterior surface embedded with pottery sherds and baked brick fragments. As with every exterior space in the quarter the pavement was covered in a dense carpet of broken vessels.

In this courtyard it is possible to see two phases of modifications. An earlier irregular pavement of unworked stones and baked brick fragments was replaced by the baked brick-lined vestibule L.2, the baked brick pavement L.11 and a new drain running under a raised baked brick threshold in the eastern entrance into pavement L.19 (Fig. 6). In addition, the top of a large vessel was a sump drain of sorts, later replaced by the baked brick drain running into L.19 to the east. All these alterations illustrated the resources invested in the modifications to the house; modifications that in the case of the baked brick would have required substantial quantities of wood, in an already deforested local environment, to fire the brick.

Lying to the east of house H I is an associated large activity area. This comprises the external courtyard L.12/13/18, which is separated from the rest of the activity area by a slender boundary wall. The spaces L.18 and L.12 may have been lightly roofed to provide protection from the elements and wide, open ends for ventilation. Lying within this narrow courtyard are two large *tannur* ovens with diameters of 0.94 m and 0.6 m respectively (Fig. 7). Through this courtyard also runs the

<sup>3</sup> This courtyard was paved in standard  $30 \times 30 \times 7$  cm whole and  $30 \times 15 \times 7$  cm half bricks. This pattern matches the paving in the entrance passageway L.2 and a proportion of the paving in L.19, suggesting that they may have been

built in the same sub-phase. The other pavements in the area do not match this rigid adherence to a pattern, with that of L.25 in the south-west alternating in a different manner.

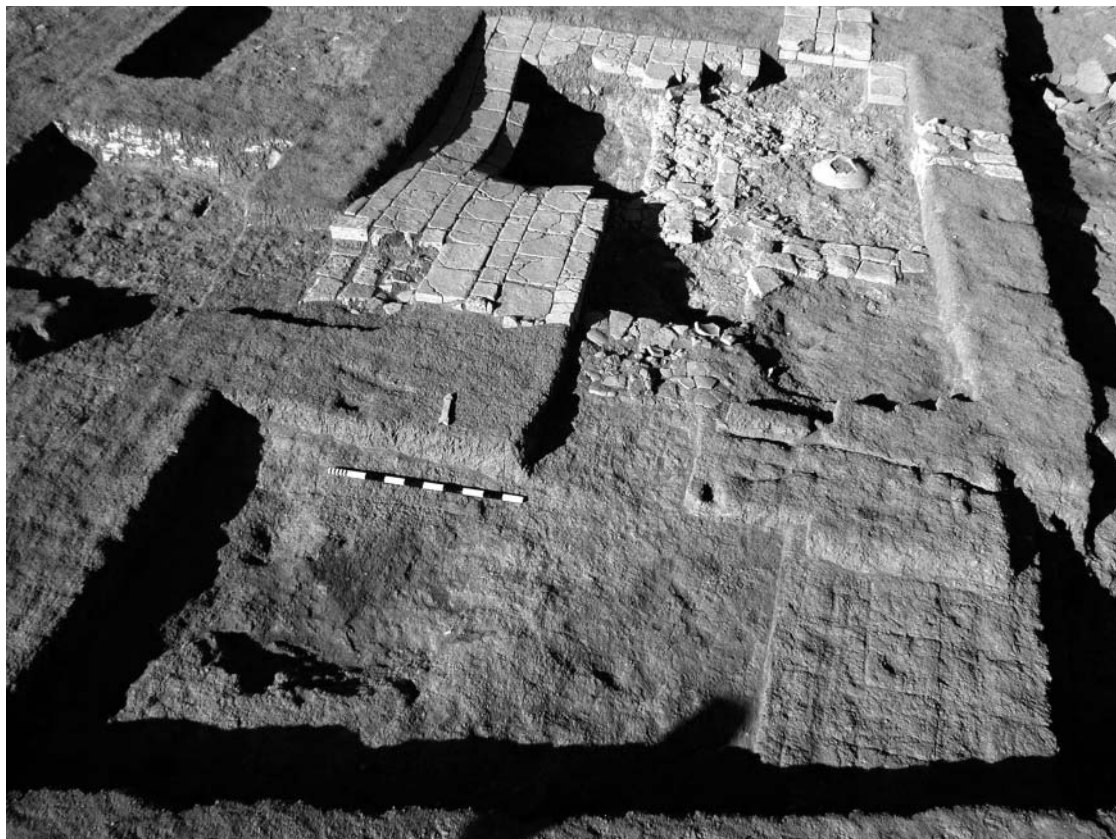


Fig. 6 L.21 and courtyard L.11, facing N.

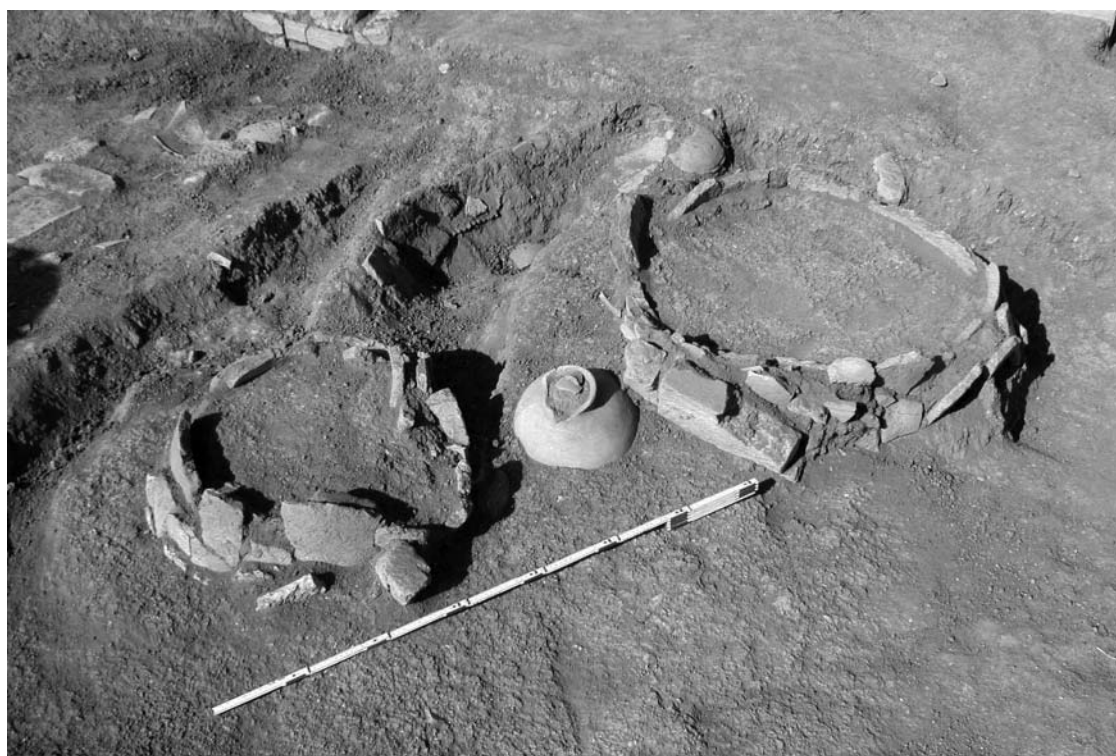


Fig. 7 *Tannur* bread ovens in L.12/13, facing W.



baked brick-lined drain from L.11. Found in the immediate vicinity of the *tannurs* were very large sherds of incomplete storage vessels and complete, restorable vessels. The northern end of this walled courtyard may have opened out on to a narrow band of baked brick paving acting as a threshold for an entrance on to the open communal space and alleyway L.4 and L.40 to the north.

The smaller courtyard L.12/13/18 opened out to the east into the courtyard L.19, a large area of regularly laid baked brick paving (Fig. 8). This space contains a rectangular possible well that was incorporated into the plan of the pavement by excluding bricks from the design to provide the necessary open space; a second crudely cut rectilinear well was found to the south-east and a possible third well to the north-east. On the surface of this courtyard again lay an abundance of broken ceramic vessels.

Traces of narrow walls enclose two sides of this courtyard; the western wall partially separating it from the smaller courtyard L.12/13/18, and a wall with a wide gate that divides it from the open space L.40 to the north. Although heavily eroded and plough-damaged, a further wall ran north-south along its eastern edge. The exterior wall of room L.17 formed the southern flank of the courtyard. Drainage was provided by a stone and baked brick-lined channel running off the southern periphery of the pavement.

The baked brick pavement covered an area of 20 m<sup>2</sup> and would have provided a substantial area for household-based economic activities. This space would have been suitable for various activities, including animal penning. The space was enclosed by a low, narrow wall and the paved surface sloped in toward the rectangular “well”, which may have served as a sump or repository for animal waste. Such a feature would have been suitable for the composting of animal waste, soiled bedding and spoiled fodder, later to be used for field manuring (Ur and Colantoni 2010: 70–71).

The partially excavated room L.17 east of H I shared a common party wall and access to the large paved courtyard L.19 (the courtyard paving extends as a threshold into L.17 in the south-eastern



Fig. 8 The L.19 paved courtyard, with L.18/13/12 and *tannur* ovens, facing W.

corner). The room itself possessed white plastered walls and a probable low platform in the north-west corner that mirrored the example found in L.6.

*Unit H II (Loci 5, 7, 9, 14 and 20)*

This domestic unit, of which only the southern half was exposed, abuts house H I to the north (see Figs. 2–3). A probable storage room L.9 opens into the small external courtyard L.5. On the opposite side of the courtyard lies a smaller and less substantially constructed square unit L.7 that abuts the southern wall of the main structure and thereby forms a short passageway L.3 that restricts access to the house. Of the main body of the house only two spaces were excavated, an internal room L.14 and an inner paved courtyard L.20.

The first small courtyard L.5 acted as the initial circulatory space, allowing access to the surrounding rooms and inner paved courtyard to the north. It initially contained a central rectangular well that was later paved over with crudely laid, recycled baked bricks and brick fragments. At its eastern extent this pavement became the stone and baked brick threshold of a gateway that acts as the main means of ingress into the house. From this threshold, a baked brick and stone-channelled drain leads down the short passageway L.3 and turns south-east to empty into the open area of L.40.

As already mentioned, on either side of the small courtyard are two rooms that had been constructed to fit neatly into the available space between the main bodies of houses H I, H II and H VI. To the west is a storage room L.9 and on the opposite side of the courtyard is a small (1.4 m square) structure L.7, which may have been an animal pen. To the north-west of the courtyard L.5 is a doorway opening into an interior room L.14. Ceramics and a pestle imply domestic activities in this room. To the north-east of courtyard L.5 is a paved internal courtyard L.20, most probably the central courtyard analogous to L.11 in House H I. The pavement again displays the resources and effort invested in these houses, being well constructed but irregularly patterned with whole and half baked bricks ( $30 \times 30 \times 7$  cm or  $29 \times 29 \times 8$  cm).

*Unit H III (Loci 25, 27, 28, 30, 32, 33 and 35)*

Although broadly grouped into the rubric of house H III this building (Fig. 9) is more likely to have been an agglomeration of small rooms and courtyards associated with the large paved activity area L.25 to the north.

To the south of the open area L.25 are two partially excavated walled courtyards L.32 and L.35 and two disjointed medium-sized rooms L.30 and L.33, not conceived as a whole but crudely attached to one another with the eastern wall of room L.30 cut into the north-eastern corner of room L.33. At first glance the arrangement of the rooms fits the “central courtyard with corridor” type unit, but the disjointed construction of the rooms deviates from this ideal plan.

The northernmost of the two rooms, L.30, has a doorway leading to the north into the L.25 activity area and another to the west into the small courtyard L.32. It appears, from traces of fine white gypsum plastering at the base of the interior surfaces and large fragments of similar plastering in the lower deposits, that the function of this room changed from domestic to storage space after a period of modification. Associated with the earlier sub-phase was a small, almost complete, globular jar resting on a basalt door-socket in the immediate vicinity of the western doorway to the courtyard L.32. The presumably ritual practice of placing vessels in association with doorways is replicated in the doorway to L.10 in house H V (below). Of the room L.33 only the northern extent has been exposed and was probably entered from courtyard L.28 to the west.

The small excavated portion of the exterior courtyard L.32 is separated from the large courtyard L.25 by a single-brick-wide partition wall with a small gate. The courtyard was empty except for two large smashed vessels resting on the occupation surface in a manner matching the looting and destruction in the other courtyards. This courtyard is connected via a doorway to room L.30 in the east and the further exterior courtyard or ancillary open transitional space L.35 to the south. Unfortunately, only a small extent of this space lies within the trench limits. Two doorjambs and a threshold of square mud bricks reinforced by irregular baked brick fragments separate these two courtyards. Resting on the dense sherd and broken baked brick paving of L.35 was the ubiquitous



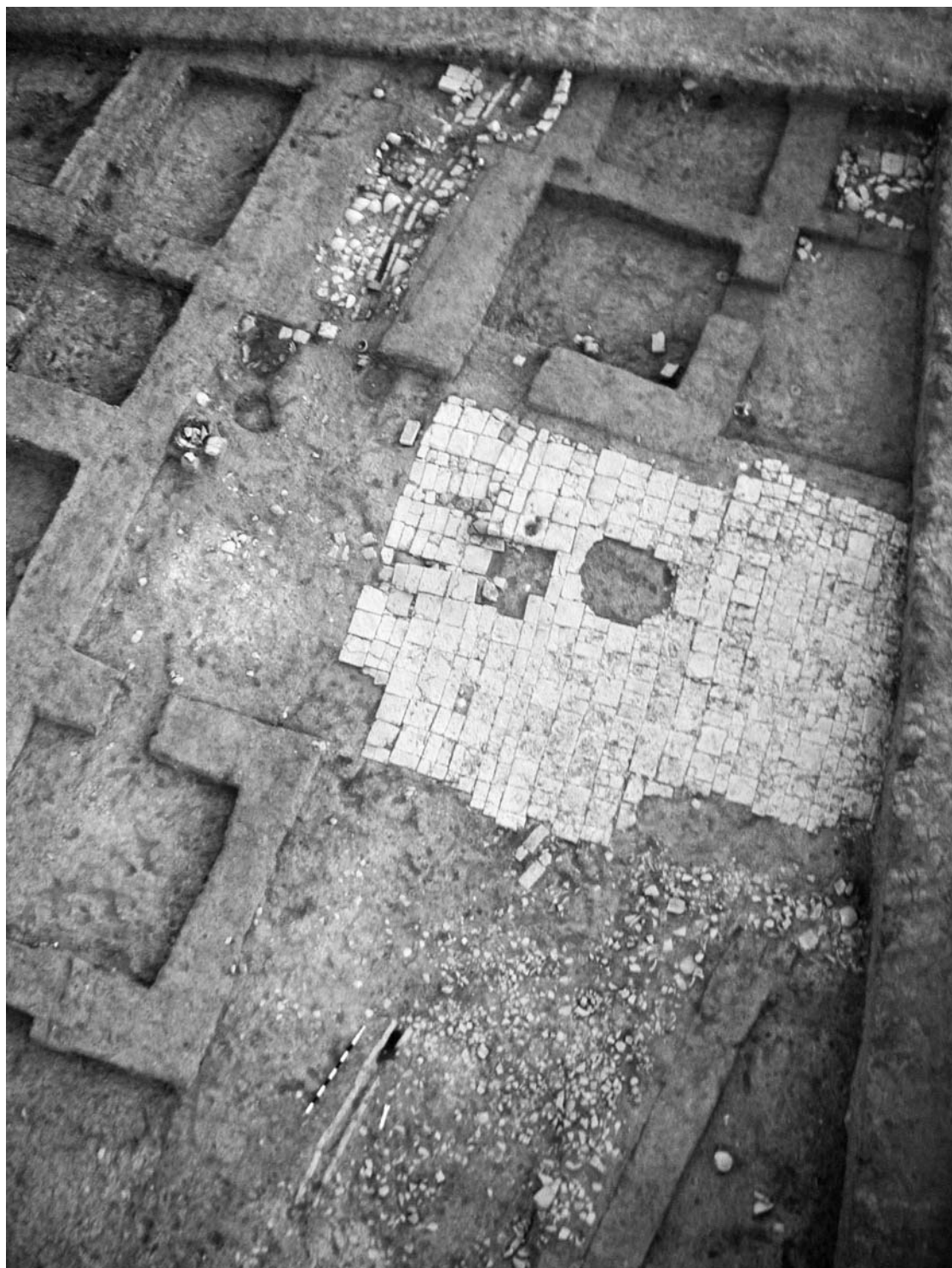


Fig. 9 The L.25 pavement and loci of Unit H III, facing S.

cluster of smashed vessels. In close proximity to the southern section of the trench were two stacked basalt door-sockets (a disused vessel and a basalt ring) suggesting a doorway immediately to the south of this exposed area of courtyard.

To the north of these spaces is the large, well constructed baked brick courtyard L.25 with an intermittently sherd-paved activity area to its east containing two *tannurs*. The paved courtyard has

two openings: a rectangular disused well or sump, and a circular well crudely cut through the paving at a later stage. The paving consists of alternating north–south rows of pale buff square ( $28 \times 28 \times 7$  cm) and rectangular half bricks with small sherd spacers between the bricks. This paving continues beneath the western section and almost entirely fills the area between houses H III and H IV to the north. At the eastern extremity of the paving there are two covered drains that were both added after the original construction of the paving and with a capping of overlapping pale buff baked bricks, irregular light-coloured stones, basalt stones and large fragments of kiln slag. These drains empty into the rectilinear “well” in the eastern half of the paving.

The eastern part of L.25 contains two *tannurs* built against the western wall of house H I and may have been partially roofed. This type of activity area, comprising *tannurs* in conjunction with a baked brick paved courtyard, also occurs in the south-eastern courtyard L.13 of house H I. Scattered across the paving and piled in its south-east corner were large quantities of sherds, complete and near-complete vessels, and small to medium worn stones. This mass of debris spilled across the threshold into the passageway L.27.

Partially bounding the courtyard to the north, and obviously affiliated with it because of the doorway facing directly onto the activity area, is a medium-sized ancillary room L.23 attached to the eastern face of house H I. As this room has a much narrower doorway than the other domestic structures in Area H it is most likely to have served as a storage room. Large numbers of smashed vessels were discovered scattered along the interior eastern wall face.

Lying between the rooms of house H III and the large central-courtyard house H I is a short passageway L.27 that opens into a small courtyard L.28 (Fig. 10). Running through the centre of the narrow passageway and small courtyard is a covered baked brick drain, surrounded by crude cobbling and broken baked brick paving. The drain emptied the courtyard L.25 to the north and from there into the street. In a manner typical of construction methods in Area H the gated threshold opening into L.25 possessed doorjambs on either side, and a small basalt vessel was utilised as a door-socket. At the southern end of this passageway was a second gateway with L.28 possessing a further *in situ* door-socket.

#### *Unit H IV (Loci 36, 37, 38 and 41)*

The south-eastern portion of this house was recovered, flanked by the street, in the north-western corner of Area H. It bears a resemblance to the complete ground plan of H I and may represent a version of this layout.

H IV consists of four distinct rooms, all of which have the characteristics of interior space. To the north is L.38, of which only a small area has been exposed. It is connected by a doorway with an irregular stone threshold to what may be a limited segment of an exterior courtyard space, lying to the west of L.41, with a large deposit of smashed ceramics and worked stone. To the south of L.41 is a doorway leading into a small room L.36. The final room so far exposed is a large interior room L.37 in the south-eastern corner of the structure. All the rooms had smashed vessels resting on the occupation surfaces, testifying not only to the thorough looting of the quarter but also to the large quantities of storage vessels employed by households in Area H.

#### *Unit H V (Loci 10 and 39)*

This unit consists of three spaces that may have composed the entrance to a larger domestic unit further to the north. Abutting and sharing the exterior wall of houses H I and H II to the east, the unit is flanked on the west by the street L.26. Opening directly onto the street was a roofed, yet partially open space L.29. No western wall is discernable but the occupation surface is clearly demarcated by the edge of the dense sherd paving of L.26, which ends abruptly against the mottled compact surface of L.29. The nature of the occupation surface suggests that this was a semi-open transitional area acting as a porch for the house H V. A small circular *tannur* (0.34 m in diameter) occupied the north-eastern corner, and slightly to the south were found the traces of an open hearth. Reinforcing the interpretation of this space as a domestic-activity and possible food-preparation area were the finds of small objects such as a piece of worked shell, sealing clay fragments and discarded lithics.





Fig. 10 The L.27 passageway, facing N.

To the north of L.29 is the entrance to L.10, an area that may have fulfilled the role of an entrance or vestibule. Embedded in a small pit cut into the western side of the mud brick threshold was a comb-incised, tripod-footed urn; a further case of a practice of ritual deposits in association with doorways. The enclosed entranceway L.10 contains an L-shaped area of baked brick paving

bounding a rectangular section of earthen flooring. Although the walls are only preserved as stubs, this area may have possessed a low interior bench running along the interior of the western wall. To the north of this entranceway is a small open area L.39 with a drain capped by baked bricks and large pieces of basalt. It ran beneath the threshold into L.10 and possibly under the pavement.

#### *Unit H VI (Locus 31)*

The final unit consists of the large room L.31 in the north-eastern corner of Area H. It appears to represent the south-western corner of a thick-walled structure, the rest of which lay outside the excavation area. This large, square interior room may have been the large reception room of a central-courtyard dwelling, as seen elsewhere in Area H in L.6. The thickness of the walls may be explained by what appear to be internal benches lining the wall, a similar feature to L.6 and possibly also L.17. No doorway to this room could be identified.

#### *Architectural comparanda*

The form of housing in Area H, and presumably at the site for the period, is based on the central-space or courtyard house, a form that is present at many sites across northern Mesopotamia in the mid- to late third millennium BC.<sup>4</sup> This style is characterised by an enclosed courtyard or covered room (Lebeau 1993: 104) surrounded by a varying number of rooms. In the case of the complete ground plan from Unit H I, we see a distinctive and idealised variation of the central courtyard house type with the addition of a corridor entrance lying to one side of the house. This form has been classed as the typical ground plan for the *Parzellenhäuser* type, e.g. at Tell Chuera (see below). By the early second millennium BC in northern Mesopotamia the central-space house had been superseded by the rectangular single-room house.

Examples of central space or courtyard houses abound in the late third millennium BC (Pfälzner 2001). Specific examples include the “Maison Rouge” at Mari (Parrot 1955: fig. 54); Tell Abu Hġaira I (Martin and Tietze 1992: Abb. 3); Tell Brak, House A (loci 46–53) in Area FS, Level 2a, north of main east–west baulk (Oates *et al.* 2001: fig. 79a) and the large house south of baulk in Area FS, Level 2a (Oates *et al.* 2001: fig. 79b); at Tell Melebiya, Maison B1–B7<sup>5</sup> in Chantier B, niveau 2 (Lebeau 1993: pl. 18) and Maison G1 in Chantier G, niveau 2 (Lebeau 1993: pl. 25); Tell Taya, House S1 (Reade 1971: fig. 3) and many examples in the Lower Town, including those in Quadrant U-bb-cc (see Lebeau 1993: pl. 115) and quadrants V-x, Z-s-t, U-y (Lebeau 1993: pls. 116–18); and finally at Tell Chuera in Field H (Moortgat 1960: Abb. 1), Field K (Moortgat-Correns 1983: Abb. 1) and Bereich K (Pfälzner 1996). Individual cases are discussed below with regard to Tell Hamoukar.

The major distinction in residential buildings lies in whether they are internally oriented, with outdoor activity areas in internal courtyards, or externally oriented, often with bounded adjacent courtyards. Simpler house forms have a greater propensity for semi-public space (i.e. external courtyards) as a boundary between household and community; central-courtyard houses and their built environments, on the other hand, are more distinct and controlled. The larger forms incorporated craft areas, for example Tell Melebiya (Lebeau 1993), Tell Bderi (Pfälzner 1990, 2001) and Tell Hamoukar.

#### *Discussion of the architecture at Tell Hamoukar*

The distribution of the archetypal central-courtyard type house stretches in an arc across northern Mesopotamia, from Tell Chuera in the west, moving eastwards via Tell Abu Hġaira, Tell Melebiya to Tell Hamoukar and finally Tell Taya in Iraq. The houses in Area H at Tell Hamoukar, and especially house H I, show close similarities in their ground plans to houses at other sites in the region. The predominant form at Tell Chuera has a distinctive combination of an entrance corridor

<sup>4</sup> The principle of an internal courtyard surrounded by rooms is also fundamental to southern Mesopotamia, e.g. Early Dynastic examples from Khafajah and Tell Agrab (Delougaz *et al.* 1967: pls. 14, 50).

<sup>5</sup> The Chantier B house examples have access corridors (e.g. Maison B1, B7 and B4 among others), but a more complex arrangement of a greater number of rooms compared to the houses in Area H.



along one side of the building and, flanking this, an often large room. Not only does this form contain the same elements of layout but often the houses themselves are organised almost identically to house H I.<sup>6</sup> With such similarities in house forms, there is a possibility that social practices<sup>7</sup> undertaken within these locales may have been similar.

Shared traits and regularities in the domestic built environment at Tell Hamoukar, such as the domestic units at the site possessing internal courtyards or spaces, shed light on common themes in the region for the late third millennium BC. Although a fundamental divide lies in the conception of the house for the period in the region, with a division between larger central-space houses and other smaller house forms seen in the region,<sup>8</sup> many of the central-space forms appear to possess an underlying, integral design,<sup>9</sup> e.g. Tell Chuera, Tell Hamoukar and Tell Melebiya. The use of an entrance passageway acting as an interface between public (alleyways and streets) and private (courtyards) spaces, as used in Building H I, is also seen at Tell Melebiya. An entrance passageway flanked by a large reception room is a common element at Tell Chuera (examples discussed above). These differences in ground plan might seem minor but they do subtly shift movement through the house and possibly alter the roles of certain spaces and the activities undertaken within them. In sum, these physical arrangements probably reflect the varying inhabitants' cultural template of the house.

Further features include the similarity in the large reception rooms equipped with benches and plastered floors. However, the sheer quantity of baked brick paving, found in association with every structure in Area H and the lower town in general, remains unique to the region and is testament to the settlement's prosperity.

The distinctive house H I in Area H might be considered an "idealised" form corresponding to Pfälzner's *Parzellenhäuser* (Pfälzner 2001). Henrickson's (1981) concept of "design grammar", with larger houses conceived as an ideal plan and smaller units using fragments of this idealised layout, is applicable here. An idealised ground plan occurs at Tell Chuera: examples include the Bereich K, Haus III and IV and Houses A and B in the *Häuserviertel*. Tell Chuera also presents a comparable manner in the generation of household units by agglomeration of rooms under a conceived organising principle, perhaps towards this "ideal". Examples of this common combination of "ideal" types and units consisting of more piecemeal forms can be seen in Field K and Field H, and conjugating of design elements similar to those found in Area H, such as the placement of *tannurs* in well-ventilated, semi-public environments, are also visible in Field K. The size of Tell Hamoukar H I, at 126 m<sup>2</sup>, is almost identical to Tell Chuera Houses A, B and C (129.6 m<sup>2</sup>, 144 m<sup>2</sup> and 129.6 m<sup>2</sup> respectively), and may be further evidence of a probable shared concept of the "house" and domestic dimensions.

### *Patterns in the architecture of the residential area*

The domestic units do not rigidly adhere to a set ground plan but rather follow elements of an idealised rectangular structure containing an internal courtyard flanked on three sides by rooms and entered via a long access corridor. The largest reception room is situated adjacent to the entrance vestibule. A complete example is H I, but parts of a similar or derived ground plan exist in H IV. Unit H III may follow this idealised layout, with an entrance corridor to an inner courtyard and

<sup>6</sup> In the cases at Tell Hamoukar the material and features recovered from these contexts suggest reception/living rooms. At Tell Chuera Bereich H Houses A, B, C and F (Moortgat 1960: Abb. 1) are almost identical in their ground plans to H I, with a central courtyard surrounding rooms and an entrance corridor and associated large reception room. This pattern is followed in Bereich K, Schicht 5c (Pfälzner 1996 Abb. 4), especially the central space Haus III and Haus IV with their distinctive corridor arrangement, and in Field K, with the notable example of the house on Ost Strasse (loci 41, 42, 43, 60, 36).

<sup>7</sup> The architecture and artefacts pertaining to specific locations in the houses of Area H furnish insights into the social and behavioural practices of the community, and especially

commensal practices. Stored fineware beakers, in association with storage vessels, were found in a number of large rooms interpreted here as reception rooms (they shared the architectural traits of low platforms or benches): L.6 of house H I and its adjoining ancillary room L.15, and the probable reception rooms L.31 (H VI) and L.17.

<sup>8</sup> For example, at Tell Beydar in Chantier B (dated to the ED IIIb–ca. 2450–2400 BC) we find smaller tripartite forms of housing (Bluard et al. 1997: 47–50; Lebeau 1996: 10).

<sup>9</sup> A concept explored by Vallet (1997), who discusses various manners in which the average house at Habuba Kabira South changed shape with the addition of modular elements or expansion of already established features, i.e. the expansion of reception rooms or the inclusion of annexes.

possible flanking rooms (L.27, L.28, L.30 and L.33). The large rooms L.31 (H VI) and L.17 (lying to the south of the large courtyard L.19) may again constitute portions of a similar ground plan with the possibility, due to similar architectural features, of both being reception rooms.

Another pattern in Area H is the orientation on a NNE–SSW axis of those units sufficiently exposed to ascertain their alignments (i.e. H I, H II and H IV). This does not however appear to be a site-wide phenomenon, since the partial structure (E I) in Area E lies on an east–west axis (a similar alignment, on initial inspection, to the two structures exposed in Area C).

Also common in Area H were large paved activity areas, for example L.19 and L.25 and the smaller example of L.5. All were cut by multiple wells, giving the impression of long use-lives.

Across Area H brick sizes were standardised, falling into two set sizes: square whole bricks ( $28 \times 28 \times 7$  cm or  $30 \times 30 \times 7$ –8 cm) and rectangular half bricks ( $14 \times 28 \times 7$  cm or  $15 \times 30 \times 7$ –8 cm). These were used both in the construction of the buildings, as mud bricks, and in the courtyard as baked bricks.

There is no rigorous standardisation in the patterns of construction, with doorways in Areas H varying in width, but overall structural elements do display consistencies. For example, slight variations in thickness of the exterior walls (between 0.85 and 0.92 m) may be due to differences in plastering and mortar thickness; in general, the walls are three standard bricks in width. Furthermore, there is some standardisation in the laying out of the baked brick paving. These paved areas were usually associated with one or more wells. The initial wells (or in the cases of the large paved activity areas possibly sumps for animal-derived refuse), which were constructed in tandem with the paving, were rectangular, whilst the later wells were circular and cut the paving. There is visible standardisation in the sizes of the “wells” with a number of baked bricks used for paving simply omitted to provide an opening (in many cases plainly 3 by  $3\frac{1}{2}$  bricks).

#### *House sizes*

The central-space house, as we have already discussed, was a frequent form in the mid- to late third millennium BC and, unsurprisingly, these types of houses are on average large forms of domestic units. Sizes range from 66 m<sup>2</sup> at Tell Chuera (Field K, House III) to 244 m<sup>2</sup> at Tell Taya (Taya IX, House 4), whilst the majority of units group around 127–205 m<sup>2</sup>. The form, as already mentioned, essentially disappears from the archaeological record at the end of the third millennium, appearing only at Haradum (Kepinski-Lecomte 1992, 1996) where it falls into a range of similar sizes.

Household size, simplistically divided into nuclear and extended family units, also plays a factor both in determining and in generating house proportions. The area of domestic units commonly accepted as nuclear ranges from 40–100 m<sup>2</sup> (Chavalas 1988: 166; Henrickson 1981), and Stone proposes that nuclear families required a “suite” of spaces: a living room, two additional rooms and a courtyard (Stone 1981: 29). The large multi-roomed central-space houses in Area H appear more suited to the requirement of multiple “suites” for extended family units. This assumption of suites, or at least the numbers of rooms that reflect household size, can be contrasted to approaches that propose between 7–10 m<sup>2</sup> per person of roofed/living space to determine the appropriate family size for a specific dwelling size (Naroll 1963; Pfälzner 1996: 122). Without textual evidence there is no simple answer to the question.

#### *Plot sizes*

The small sample size of domestic structures at Hamoukar renders it impossible to construct a comparison of the various unit sizes. The main structure of H I had an area of 126 m<sup>2</sup> and the entire reconstructable plot/compound comes to approximately 171 m<sup>2</sup>. Analysis of this structure does nonetheless shed light on a possible pattern in the use of standardised dimensions, such as the *šar* (Kolinski 2000; Pfälzner 2001: 397). The footprint of the main structure of H I covers an area of 126 m<sup>2</sup>, exactly 3.5 *šar*. The entire reconstructed plot covers 171 m<sup>2</sup> or 5 *šar*. The consistency in measurements, although limited to a single example, does point towards the standardised use of house and probably plot sizes in this particular case. However, the lack of texts from the site has not allowed any insights into property transactions within the community.

In the third millennium BC plot sizes are easier to determine, since the central-space units are presumed to occupy the entire plot. At Tell Mozan, Tell Taya, Tell Chuera and Mari they commonly lie within the 108–44 m<sup>2</sup> size range.

*Spatial analysis of the built environment*

As a means of understanding the character of the built environment the proportions of space allocated to interior, exterior and open/public space in Area H have been calculated. Analysis of this kind is useful as a guide to socio-cultural spatial practices and in the case of Area H allow us an insight into the structuring practices and levels of intentionality behind the construction and utilisation of the built environment. The most consistent and reliable proportion is that of the area occupied by the walls and doorways of the structures: in Area H this amounts to 29.6 per cent of the total area of the sample. This figure points towards a comparative density and substantiality of construction (sparser levels of construction would modify the proportion of space occupied by the actual architecture). For the proportions of space allocated to interior, exterior and open/public space Area H has a roughly equal balance between interior and exterior space (25 versus 29.15 per cent) and a high proportion, over 16 per cent of the total sample, of open or public space. In a relatively compact urban environment this reflects the community need to organise its available space efficiently yet enable ease of access to units and openness of activity areas. The built environment was well organised, although not apparently in a planned setting, with houses built on similar alignments and in close proximity to one another. The units were separated by tracts of communal shared space and means of communication, well maintained with sherd paving and supplied with fresh water from wells. Even while expanding within the available space, the occupants of the quarter managed to maintain the integrity of this shared communicative space.

If we turn to the interaction between the inhabitants of the residential quarter, the architecture provides clues to the segregation of space within the community and the physical setting for the quotidian interaction that would have reflected, by both restricting and encouraging interaction, the community's behavioural codes. Assuming that communities using external courtyards were more open to public interaction than those using the inward-looking central-courtyard houses where daily activities took place away from public scrutiny, one would draw the conclusion that the inhabitants of Area H practised a high level of segregation. However, the common occurrence of large, semi-public open activity areas presents a more complicated picture of interaction between the inhabitants and reflects behavioural codes more nuanced than a straight dichotomy would imply.

Public areas, as represented by L.26 and L.40, are separated from the inner private areas of the domestic units by transitional/boundary zones, often with limited means of access; examples include the gate and alleyway to H II (L.3/4), the doorways to H I through private courtyards (L.12/13/18 and 19) and the large paved activity area L.25. These transitional zones divide inner and outer, private and public spaces, creating uncertain social boundaries and values of privacy within a community. As mentioned above, an important indicator of the demarcation of the built environment is the role of internal and external courtyards as introverted and extroverted space. The manipulation of space in the context of Area H is via a combination of internal courtyards (L.11 in H I and L.20 in H II), external courtyards (L.19 in H I, L.5 in H II and L.32 in H III) and open, easily accessible activity areas (L.25 and L.29). The last two area types represent a high level of permeability between the liminal fringes of public areas (at the edges where streets and communal spaces merge into open courtyards and dead-end passageways, etc.), which may be due to a number of local socio-economic reasons. For loci of business and craft production openness is desirable, but does it also mean that this quarter was socially open and that the society did not consider that there was a necessity to have the strict construction of boundaries between inner and outer, stranger and occupant? This would be a stance challenged by the community's inward-looking, internal-courtyard houses.

*III. Pottery from Area H*

The archaeologically fortuitous circumstances behind Hamoukar's sudden and final abandonment resulted in a particularly rich ceramic corpus that from the perspective of pottery chronology can safely be assumed to represent a snapshot in time. Vessels were not only abundant, they were also found in reconstructable and in some cases even intact condition on the final floors of the excavated structures. The pottery from Area H represents one of the most spatially coherent assemblages from later third-millennium northern Mesopotamia. In this section the major ceramic forms, fabrics and decorative styles will be described, and non-exhaustive comparison will be made with published corpora from neighbouring sites in the Khabur basin and northern Iraq.

### Overview

The 194 forms illustrated here represent almost all the intact or restorable vessels from Area H, and many sherds with complete or nearly complete profiles. The exceptions are large storage vessels, predominantly from L.6 and L.19. Sherds from these vessels had heavy calcium carbonate accretions which had to be removed before restoration could be undertaken. The removal of these accretions and the restoration of heavy and thick-walled vessels entailed a lengthy conservation process that could not be completed before the conclusion of the 2001 field season.

The pottery from Area H was found directly on the floors of the rooms (Fig. 11); in no case does it appear that rooms had gone out of use and were being used for rubbish disposal by neighbouring households. Some vessels, particularly small shapes, were intact; most, however, were broken but restorable. The spatial distribution of the sherds leads us to believe that these vessels had been deliberately smashed. Sherd concentrations were most abundant up against wall faces and especially in corners, as if vessels had been thrown against the walls. When it was possible to identify stratigraphic relationships between sherds of individual vessels, these also suggested deliberate destruction. For example, a concentration of smashed beakers (including Nos. 31–34) near the plastered bench in L.6 was beneath the sherds of a large storage jar; it is rather unlikely that these vessels had been stored in this arrangement. When structures are abandoned voluntarily, households tend to take most house furniture with them. The great quantity of ceramic materials, in conjunction with the evidence for unburied human remains (see above), leads us to propose that Area H was sacked and looted. Similar conditions at other exposures of the final occupation of the later third-millennium lower town make it likely that this event was city-wide, and marked the end of the city until its reoccupation, on a much reduced scale, in the Iron Age.

The Area H ceramic assemblage has not, however, remained undisturbed since this event. With time, the walls collapsed inward and the lower town eroded into a flat mound. The new surface was

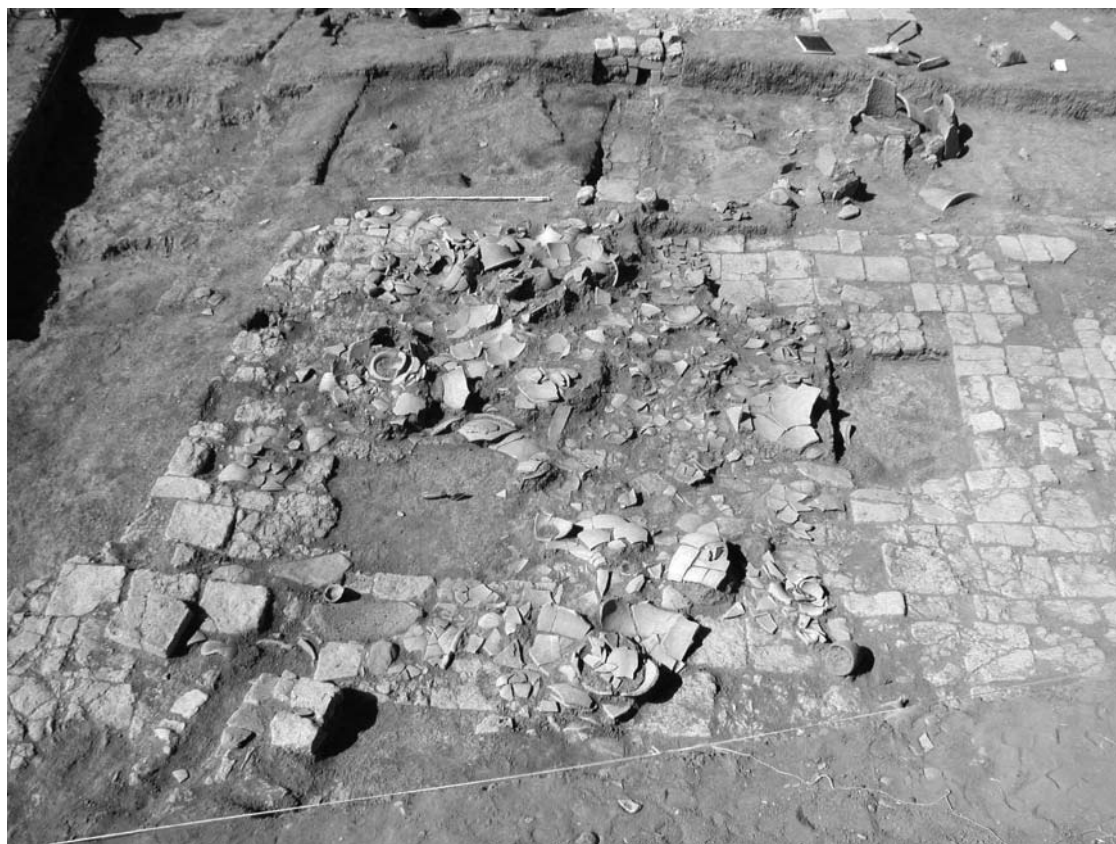


Fig. 11 Smashed vessels found *in situ* on the L.19 pavement, facing W.



subsequently stable enough for processes of soil formation to begin, resulting in thick accretions of calcium carbonate on the sherds. The assemblage was further altered when the lower town came under cultivation. Ploughing certainly resumed at the time of the formation of the modern village at some point in the 1940s or 1950s, but may have begun as early as the first millennium BC, when small Iron Age and Hellenistic villages occupied areas of Hamoukar's eastern lower town (Ur 2010b). In the eastern half of Area H ploughing was deep enough to reach into the layers of smashed pottery. It is probable that nearly complete vessels from Unit H I lost some sherds to the plough zone, particularly in L.19, where the floor was only 10–15 cm below the modern ground surface.

The deliberate smashing of the ceramic inventory of the Area H houses raises questions about the spatial integrity of the room assemblages. Can we assume that the vessels found in a given room were originally stored or used in that space, or might they have been moved during the looting? This question is difficult to evaluate on present evidence; we assume here that vessels were not removed from the architectural space in which they were found at the time of the looting, although it is clear that their intra-locus findspots were not identical to their positions during the lives of the houses.

Barring any heirlooms, the Area H ceramic assemblage represents a single moment in time. No absolute dates are available; Area H's looting was not accompanied by burning, and the two samples taken for radiocarbon dating turned out to be burnt bitumen. We are left with the necessity of a relative dating, based on ceramic parallels from neighbouring sites. This process is complicated by substantial regional variation in the second half of the third millennium BC (Lebeau 2000) and indeed, Hamoukar's assemblage does show some characteristics absent or uncommon in other corpora. Nonetheless, through comparison with Hamoukar's closest neighbors at Brak (Oates 2001), Mohammed Diyab (Nicolle 2006) and Nineveh (McMahon 1998), it is possible to propose a late Akkadian or post-Akkadian dating for the final occupation of Area H. On the other hand, the absence of post-Akkadian forms like the dark-rimmed orange bowl and the various MB I forms known from Chagar Bazar Area D (McMahon and Quenet 2007) caution against a later dating. Further justification for this chronological placement will be given below with reference to specific ceramic types.<sup>10</sup>

#### *Description of forms, fabrics and decoration*

The pottery from Area H has been roughly divided into fifteen general types, each of which subsumes a substantial amount of variation. These divisions are purely etic in nature, and do not correspond to any ancient typological conception. The presentation here will be primarily descriptive, although in a few places we venture some functional interpretations.

The most common ware for the Area H assemblage is an evenly fired yellow or yellow-green common ware with a sandy fabric. This texture is likely characteristic of the clay itself, rather than any deliberately introduced tempering. On smaller vessels often no temper is found, or only rare to occasional fine chaff or limestone. For larger vessels more and coarser temper was added, generally medium chaff or more abundant limestone. Smaller quantities of other distinctive fabrics are also found, particularly blue-grey stoneware, grey-brown burnished ware, and a dark gritty cooking ware.

#### *1. Beaded rim cups (Fig. 17 Nos. 1–18)*

This hemispherical cup form is characterised by a fine beaded or recessed rim and a flat or slightly concave base. Qualitatively, its size range appears to be bimodal. A small version with rim diameters around 6 cm (Nos. 11–15) and a large version with rim diameters between 8 and 10 cm (Nos. 1–10). One large specimen had a pedestal base (No. 17). A single particularly large example (No. 18) appears to be an outlier. Most specimens have green to yellow surfaces and a sandy, evenly fired fabric.

Despite its frequency in Area H this form does not occur at Brak, but may be related to a similarly sized cup with a distinctive footed base (Oates 2001: fig. 441). It occurs in Akkadian levels at Mohammed Diyab (Nicolle 2006: figs. 7–14 Nos. 9–10). The rim of this vessel form was THS survey diagnostic T7/19 (for this and subsequent survey diagnostic designations, see Ur 2010b: appendix B).

<sup>10</sup> A detailed analysis of the late third to early second-millennium ceramics from Tell Barri and Tell Mozan (Orsi 2009) appeared as this study was being completed.



Fig. 12 Stoneware vessels from Hamoukar Area H. Back row right: No. 23; front row left: No. 77.

2. *Beakers* (Fig. 12, Fig. 17 Nos. 19–29, Fig. 18 nos. 30–53)

The most characteristic later third-millennium serving-vessel form is a straight-sided beaker with a flat or concave base. In Area H, this vessel occurred in fine common ware and in stoneware. Stonewares were found in substantial numbers in Area H and across the lower town surface. Area H stoneware beaker rims generally range between 9 and 14 cm; most preserved bases are slightly concave (e.g. Nos. 20–25). Fabrics are grey to blue-grey, with yellow or pinkish horizontal streaking.

Non-stoneware beakers (Nos. 30–53) have nearly identical morphologies and proportions but are made of a fine sandy fabric which has been fired to a yellow, buff or green surface colour. Some examples (Nos. 33–34, 38–39, 42, 44) are slightly coarser in fabric and manufacture around the base and occasionally have string-cut bases. Most beakers are 10–15 cm in rim diameter; however, a discrete group of larger examples (Nos. 49–50) have rims 22–25 cm in diameter. A stack of at least nine fused beakers, which had been accidentally overfired, was found in L.11 near its southern door.

Mid- to late third-millennium stonewares are perhaps the most easily recognisable diagnostic across a large area of northern Mesopotamia, for which a vast literature exists (see recently Oates

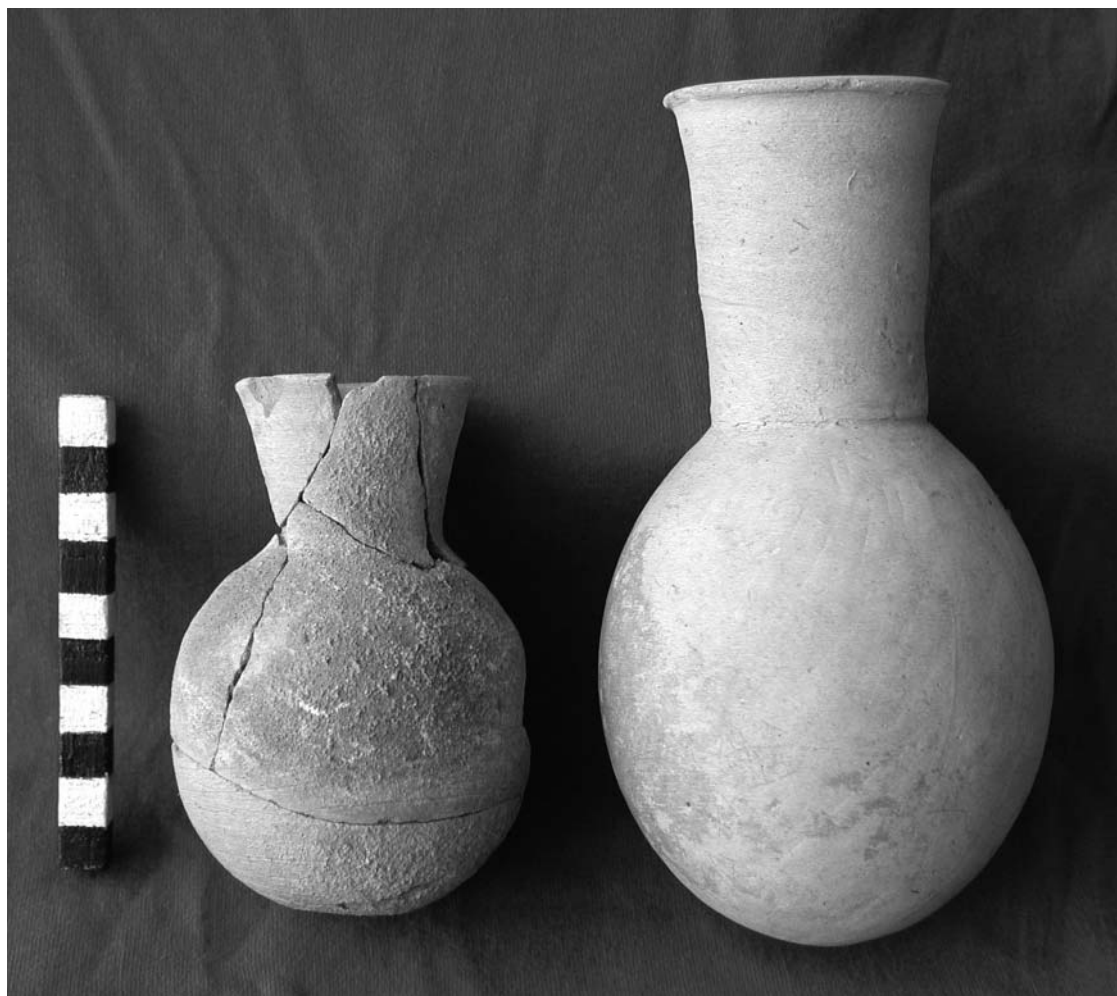


Fig. 13 Small bottles from Hamoukar Area H. Left: No. 76, right: No. 74.

2001, Schneider and Daszkiewicz 2001). At Brak, the blue-grey variety is most common in the Akkadian levels but is found in earlier and later phases as well (Oates 2001). Non-stoneware straight-sided beakers are also very common in Akkadian levels at Brak (Oates 2001: figs. 438–41). Stoneware is one of the most frequently occurring survey types on Hamoukar's lower town (T7/5). Rims (T7/20) and bases (T7/2) of non-stoneware beakers were also distinctive enough to be used as surface diagnostics.

### 3. *Small bowls (Fig. 19 Nos. 54–66)*

Also common as serving forms were a series of small convex bowls with flat bases. In some examples the convexity is very slight (e.g. Nos. 57–58). Some of the larger examples have small beads at the rim (Nos. 54–56). Many have a slightly incurving rim which might be called beaded on some examples (Nos. 60–66). One bowl had a rectangular horizontal lug with two vertical piercings (No. 54).

Most of the Area H round bowls are found in levels described as Akkadian at Brak (Oates 2001: figs. 430–31).

### 4. *Grey-ware bowls (Fig. 20 Nos. 67–73)*

A distinctive series of bowls was found in grey-ware fabric, most often burnished, with sand and occasionally fine chaff temper. Surface colour varies between dark grey and brown but is



Fig. 14 Jars with comb-incised decoration from Hamoukar Area H. Left to right: Nos. 109, 114, 110.

predominantly grey. Rims are rolled but show a considerable range of variation. The reduced firing conditions resulted in a soft vessel wall that proved to be friable and rendered these bowls difficult to restore. When bases were preserved they were flat or slightly convex.

Burnished grey-ware bowls are uncommon but occur in Akkadian levels at Brak (Oates 2001: No. 216). The type was not considered diagnostic of any particular period in the excavations at Mohammed Diyab but was used in the surface collection at that site (Lyonnet 1990: fig. 11). Given its relative frequency in Area H, it is possible that this bowl type has a distribution restricted to the eastern basin. This rim type was designated as T7/13 during the Hamoukar surface collection.

##### 5. Bottles (Fig. 13, Fig. 20 Nos. 74–85)

Area H produced a range of globular or bag-shaped necked vessels. Most have simple out-turned rims but some have small beads. The finer examples (e.g. No. 74) have straight necks. The fineness of the fabric varies in relation to the size of the vessel, with the smaller examples having the standard fine sandy fabric and the larger examples tempered with medium chaff or fine lime. One bottle occurred in stoneware fabric (No. 77).

Unique in Area H was the “Syrian bottle” (No. 78). When found elsewhere this form generally occurs in a burnished grey ware (Oates 2001: Nos. 194–204); the fabric of the Area H example is a pale orange with fine lime temper.





Fig. 15 Cylindrical object (No. 191) from Hamoukar Area H.

At Brak the “Syrian bottle” in its burnished grey ware version is uncommon but occurs mostly in Akkadian levels (Oates 2001: 159–60); likewise, the tall-necked bottles with round bodies are often found in Akkadian levels as well, though their use extended into the post-Akkadian levels (Oates 2001: 177).



Fig. 16 Lids or *tannur* tools from Hamoukar Area H. Right: No. 194; left: No. 193.

6. *Large bowls or basins* (Fig. 21 Nos. 86–89)

A set of large bowls or basins can be distinguished by their thick vessel walls and squarish rims, which are often slightly bevelled and thickened on the interior. Complete examples often have a single lug attached near one rim. This rim occurs on both circular and oval vessels (e.g. No. 89).

At Mohammed Diyab this form is found in Akkadian and post-Akkadian levels (Nicolle 2006: figs. 7–14 no. 5, 7–18 no. 8). Oval trays at Brak are uncommon but occur in both Akkadian and post-Akkadian contexts (Oates 2001: nos. 1699–700). Rims of this type are especially durable and are found on the surface across Hamoukar's lower town. They were used as a later third-millennium survey diagnostic for the North Jazira Project (Wilkinson and Tucker 1995) and were designated as T7/9 for the Hamoukar survey.

7. *Deep basins* (Fig. 22 Nos. 90–99)

These vessels have straight or slightly concave sides, slightly bevelled rims and a distinctive flat base that extends outward, presumably to give the vessel additional stability. Most have rims in the range of 30–33 cm; complete examples are generally 16–17 cm deep, although shallower versions exist (Nos. 97–98), as does a tall ledge-rimmed example (No. 90). No. 99 is an especially large example without the extended flat base. Vessels are yellow to buff and tempered with common to frequent medium chaff. The base form, combined with its frequency in the L.19 courtyard, suggests that these vessels may have been used as part of vigorous mixing, or for feeding or watering animals.

At Brak ceramic parallels for this form were found in Phase L (Oates 2001) and M (Akkadian) levels (Oates 2001: Nos. 1046–55). At Mohammed Diyab a similar base is dated to the “Old Jazira I” period (early second millennium; Nicolle 2006: fig. 7–23 No. 6). The Hamoukar survey designated the base as T7/11 and the rim as T7/10.

8. *Jars and urns with comb-incised decoration* (Fig. 23 Nos. 100–10, Fig. 24 Nos. 111–19)

These tall urns have several distinctive features. Vessel bodies are tall and straight-sided or slightly convex, with walls thinned by vertical scraping on the interiors. Rims generally flare outward

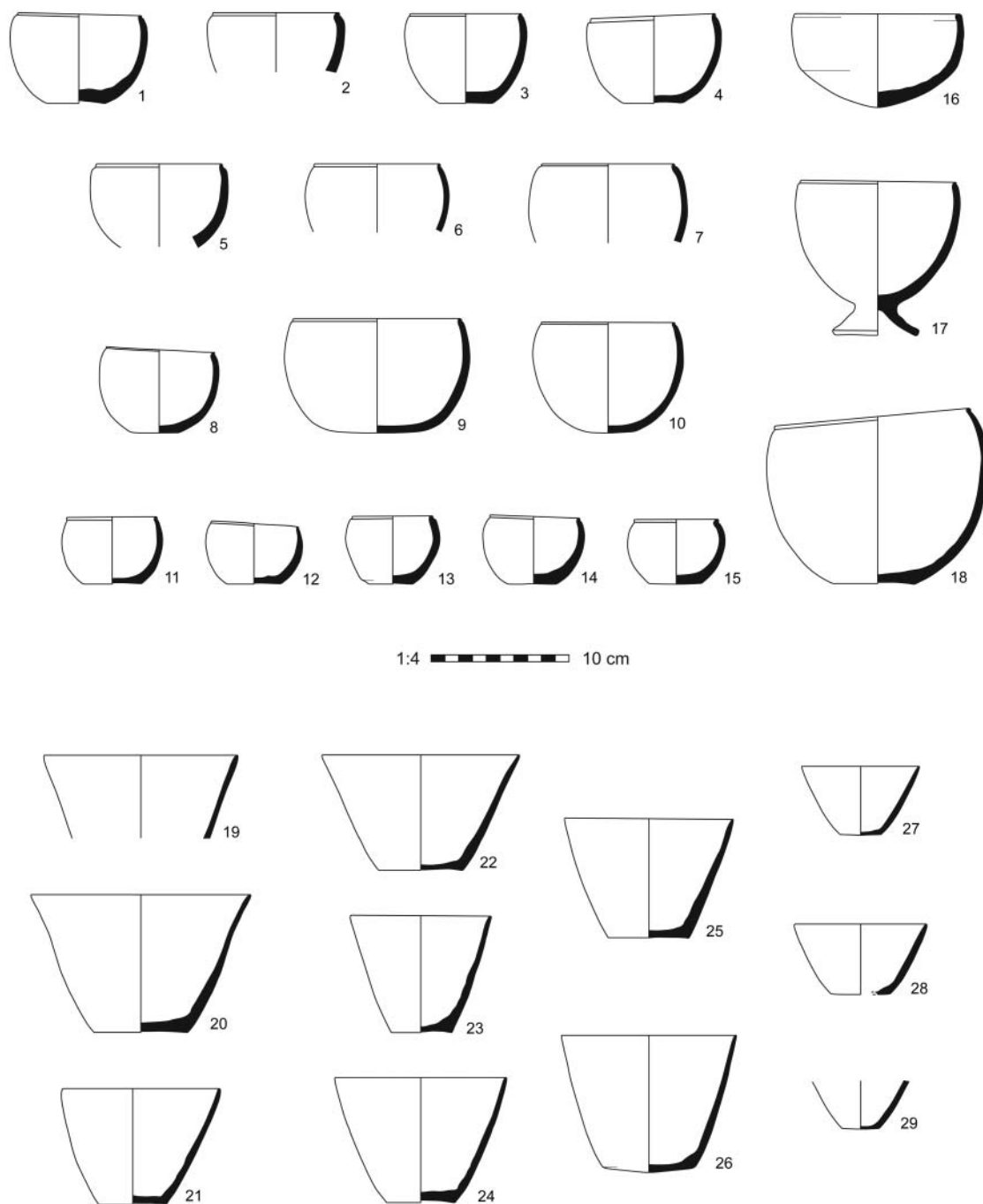


Fig. 17 Beaded-rim cups and stoneware beakers from Hamoukar Area H. Scale 1:4.

sharply; bases are slightly convex with three applied lugs. Size distribution appears to be bimodal, with a large version standing around 50 cm tall (e.g. Nos. 113–14) and a shorter version 23–25 cm tall (Nos. 108–10). Fabrics are the standard yellow to yellow-green sandy ware with common medium chaff and in some examples also lime temper. Included here, on account of their decoration, are two more globular jars with triangular rims (Nos. 102, 112).

These urns are also distinguished by comb-incised decoration in several patterns, in all cases on the upper part of the body, just below the rim. Most common is an arrangement of two horizontal



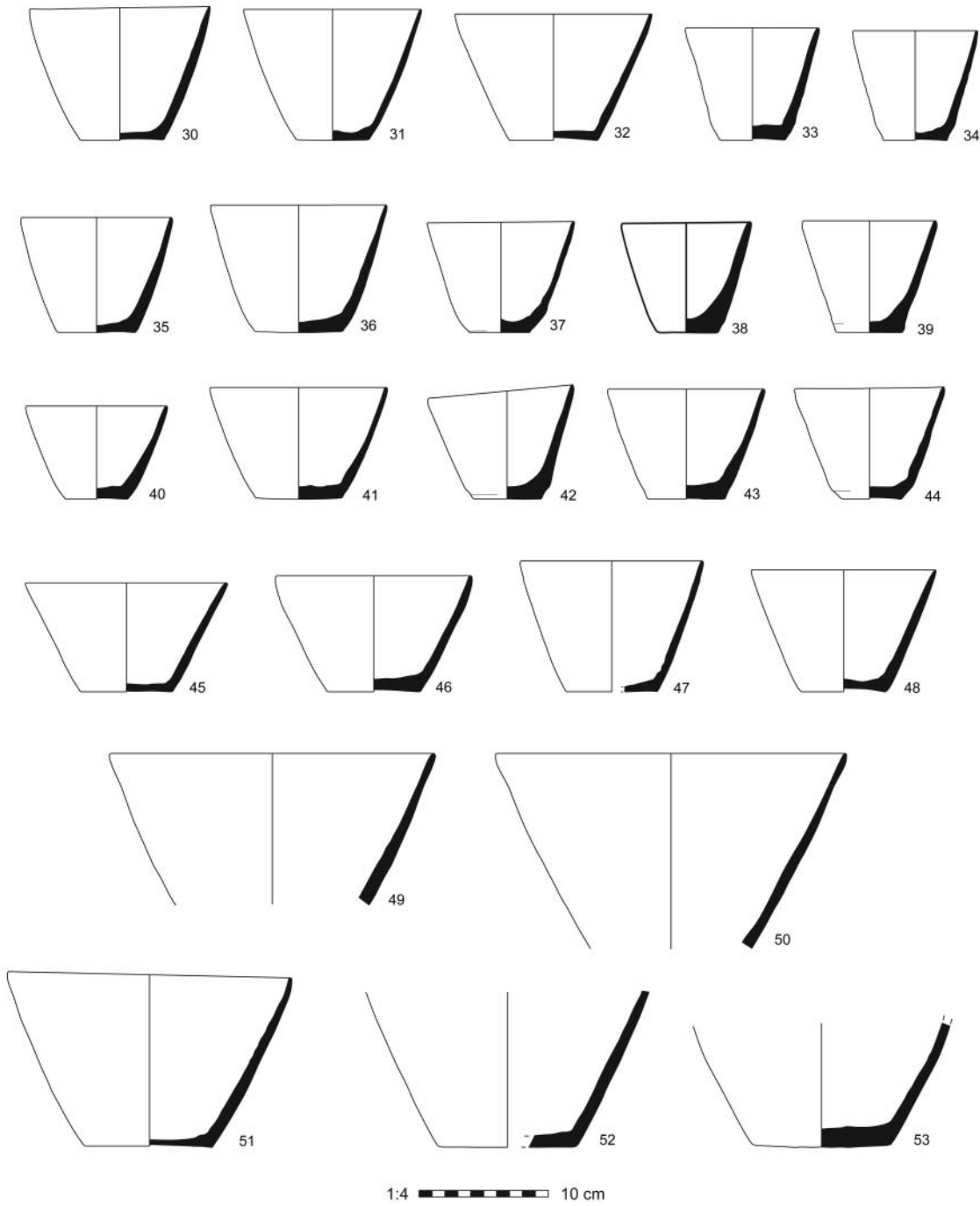


Fig. 18 Beakers from Hamoukar Area H. Scale 1:4.

bands with a third wavy band between them (Nos. 100–3, etc.). This central pattern can also be more angular, in the form of triangles (Nos. 104, 110). The horizontal bands can also frame punctate patterns, made by pressing much wider combs directly into the clay. Most common on the larger vessels is a zigzag (Nos. 114, 119) or double chevron (Nos. 113, 115) pattern. In one example the punctate pattern is vertical (No. 111); in another, three horizontal registers contain two rows of diagonal punctates above a wavy band of comb incision (No. 112).

The number of “teeth” in the comb (presumably dried cereal stalks) used to draw the horizontal and wavy bands is between three and five, with a single example of a six-toothed band (No. 117).

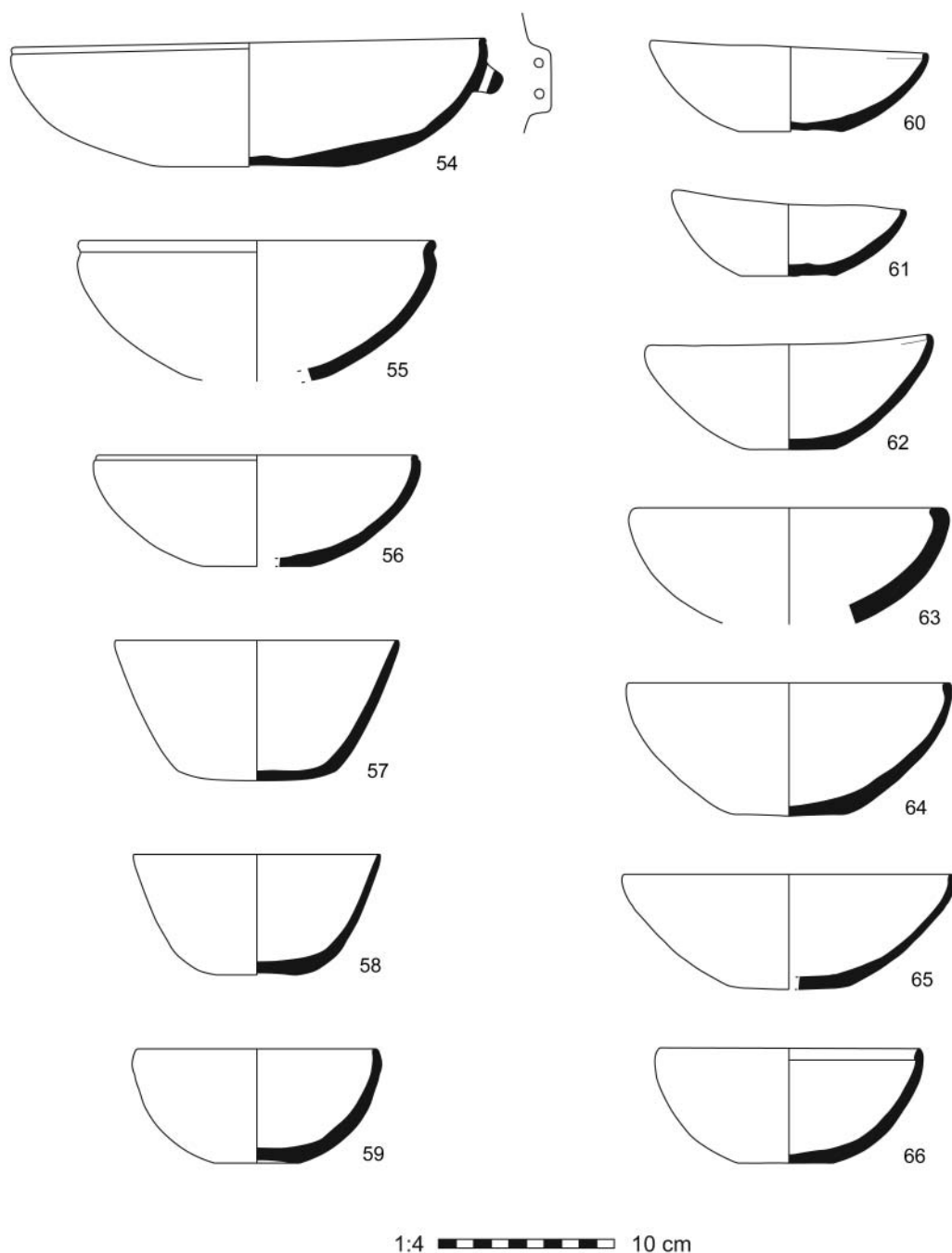


Fig. 19 Small bowls from Hamoukar Area H. Scale 1:4.

Alongside differences in fabrics, this feature distinguishes the late to post-Akkadian comb incision from later versions on Hellenistic through Islamic pottery found in the basin, which generally have ten or more teeth and are very finely incised. The number of points in the elements of the various punctate designs ranges from nine to sixteen.

Despite their frequency at Hamoukar in Area H and in the other lower town trenches, these urns are unknown elsewhere in the basin, even at neighbouring sites like Leilan, Mohammed Diyab and Nineveh. A single parallel for the base comes from Tell Fisna in the Eski Mosul Dam region (Numoto 1988: fig. 25 Nos. 216–17). Although the forms differ dramatically, comb incision was most frequent

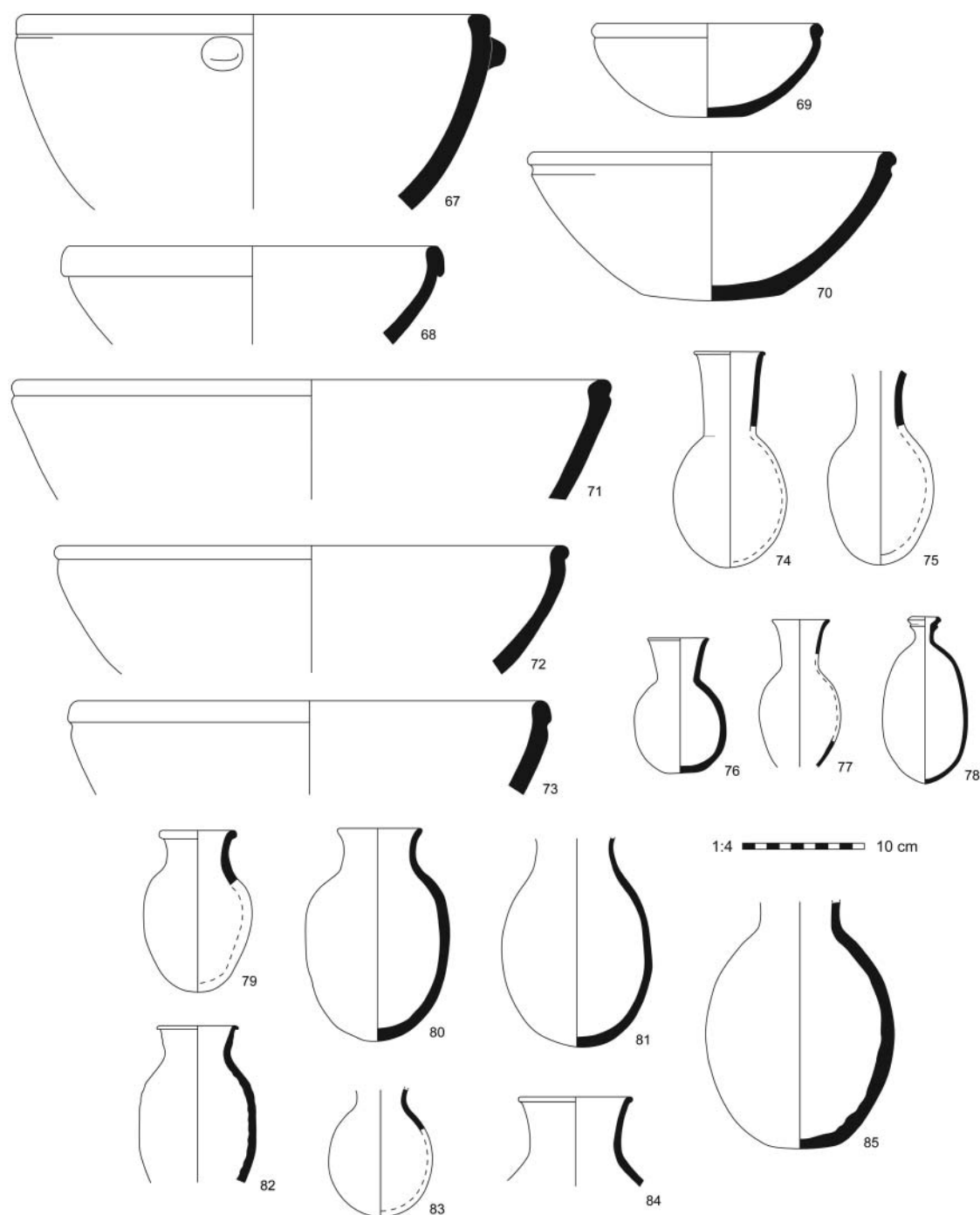


Fig. 20 Greyware bowls and bottles of various fabrics from Hamoukar Area H. Scale 1:4.

in the Akkadian and Ur III levels in the KG sounding at Nineveh (McMahon 1998: 8), and in post-Akkadian levels at Chagar Bazar (McMahon and Quenet 2007), Mohammed Diyab (Nicolle 2006: figs. 7–19 Nos. 2, 5, 8) and Brak (Oates 2001: figs. 404–5), where both the pattern of a wavy band between horizontal bands and the diagonal punctate pattern was most typical of the post-Akkadian (Oates 2001: 164–65, 170). In the Hamoukar surface collection both comb incision (T7/4) and the lugged foot base (T7/12) were employed as diagnostic types.



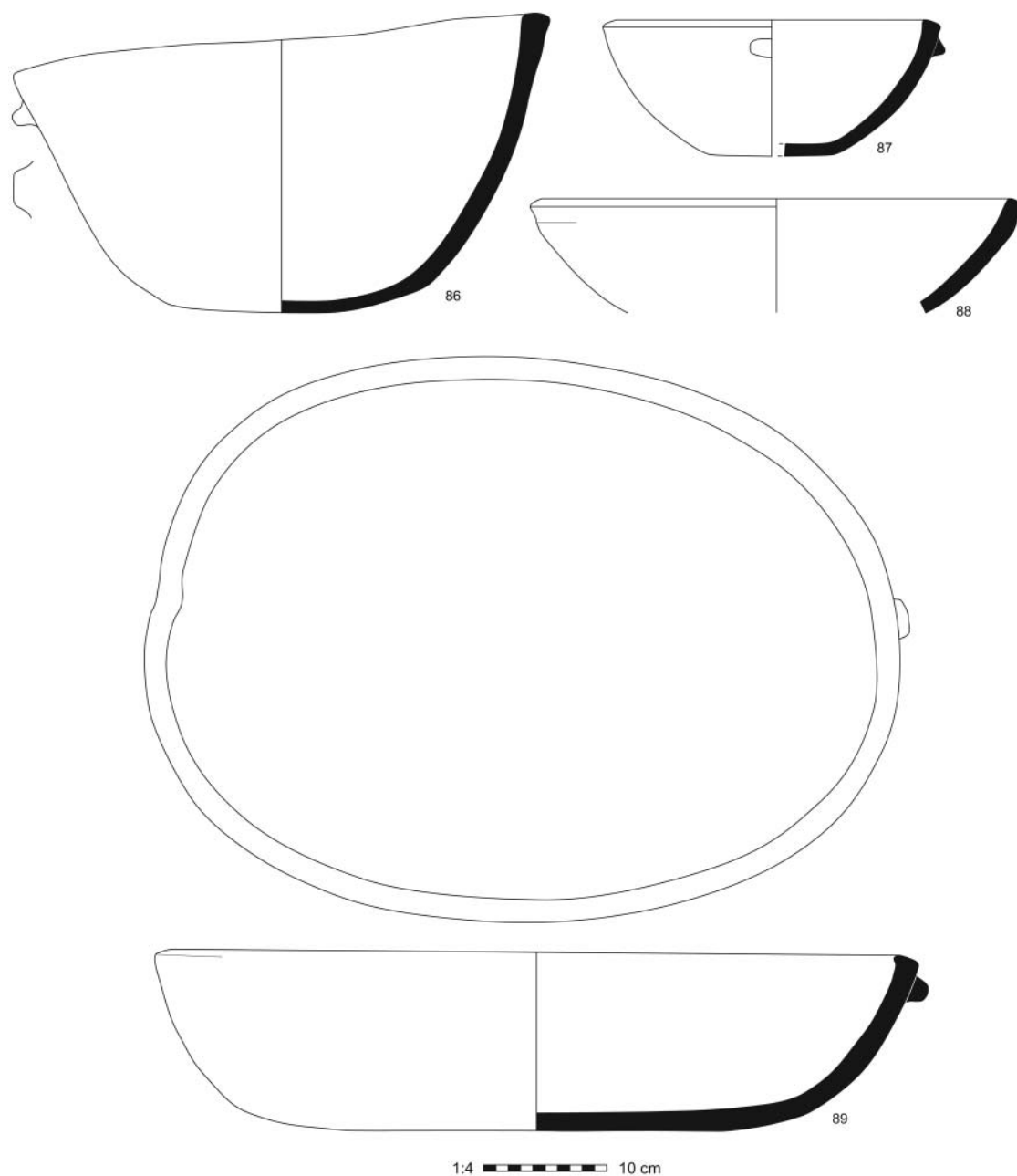


Fig. 21 Large bowls or basins from Hamoukar Area H. Scale 1:4.

9. *Medium storage jars* (Fig. 25 Nos. 120–29, Fig. 26 Nos. 130–38)

Several round-bodied medium storage jars were found complete or near-fully restorable in Area H. Bases are round (e.g. Nos. 122–23). Necks are short with slightly everted rounded rims. Several large rim fragments whose bodies were not restored also belong to this group (Nos. 124–29). One example has two horizontal handles on its shoulder (No. 123). A second group has a narrower body, a higher neck and a flat base (Nos. 134–35, 137). A third group comprises larger vessels with triangular rims and wide mouths (130–33, 138). Vessels are in yellow to yellow-green ware with common chaff temper and are well fired throughout.

Round-bodied jars such as these are common in northern Mesopotamia throughout the second half of the third millennium, although the simple round-rimmed versions like the Area H examples

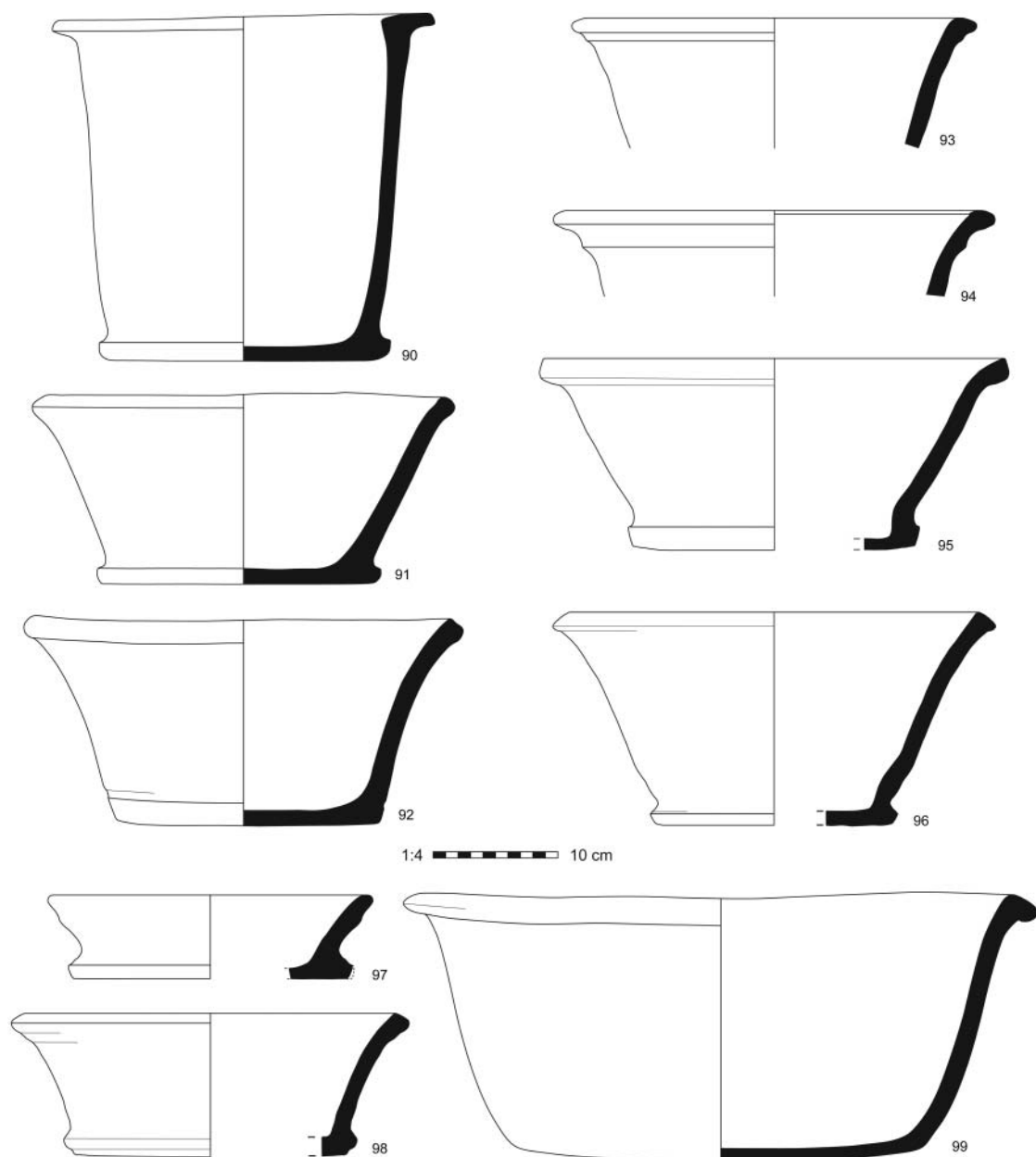


Fig. 22 Deep basins from Hamoukar Areas E and H. Scale 1:4.

tend to be Akkadian or later at Brak (see, e.g., Oates 2001: figs. 426, 444). The jar with two pierced lugs (No. 123) is paralleled by Akkadian and post-Akkadian examples at Brak (Oates 2001: Nos. 831, 1387, 1389).

#### 10. Large jars and urns (Fig. 27 Nos. 139–57)

Within this type falls several groups of large vessels with wide mouths and flaring rims. The largest (Nos. 142–47) have rim diameters around 30 cm and are 40 cm or more tall. Rims are folded and flare sharply outward. On some examples there are small ridges beneath the rim (e.g. Nos. 143–44, 147) or a horizontal incised line on the rim interior (Nos. 140, 142). Bases, when preserved, are flat or slightly convex.

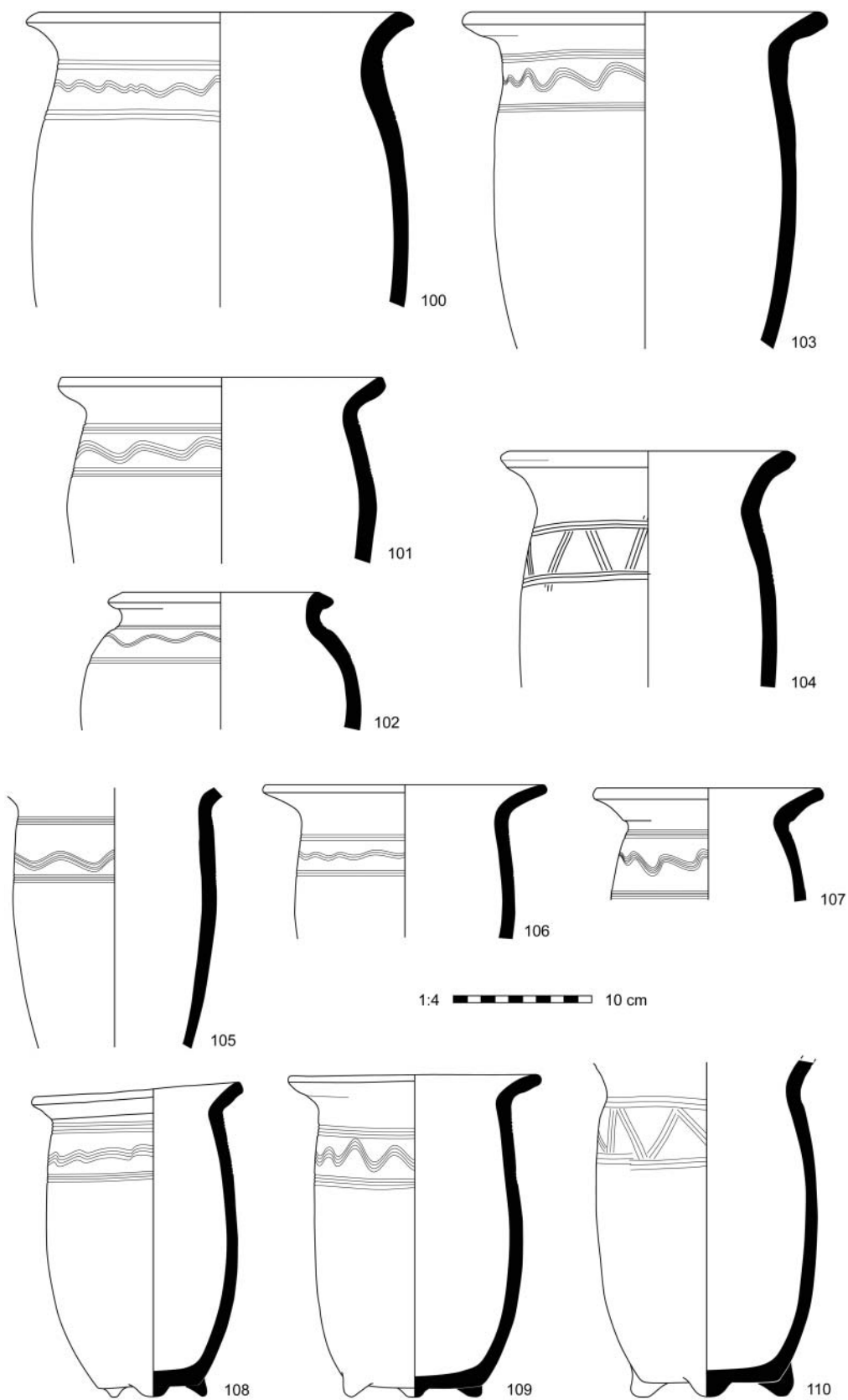


Fig. 23 Jars with wavy bands of comb incision from Hamoukar Area H. Scale 1:4.



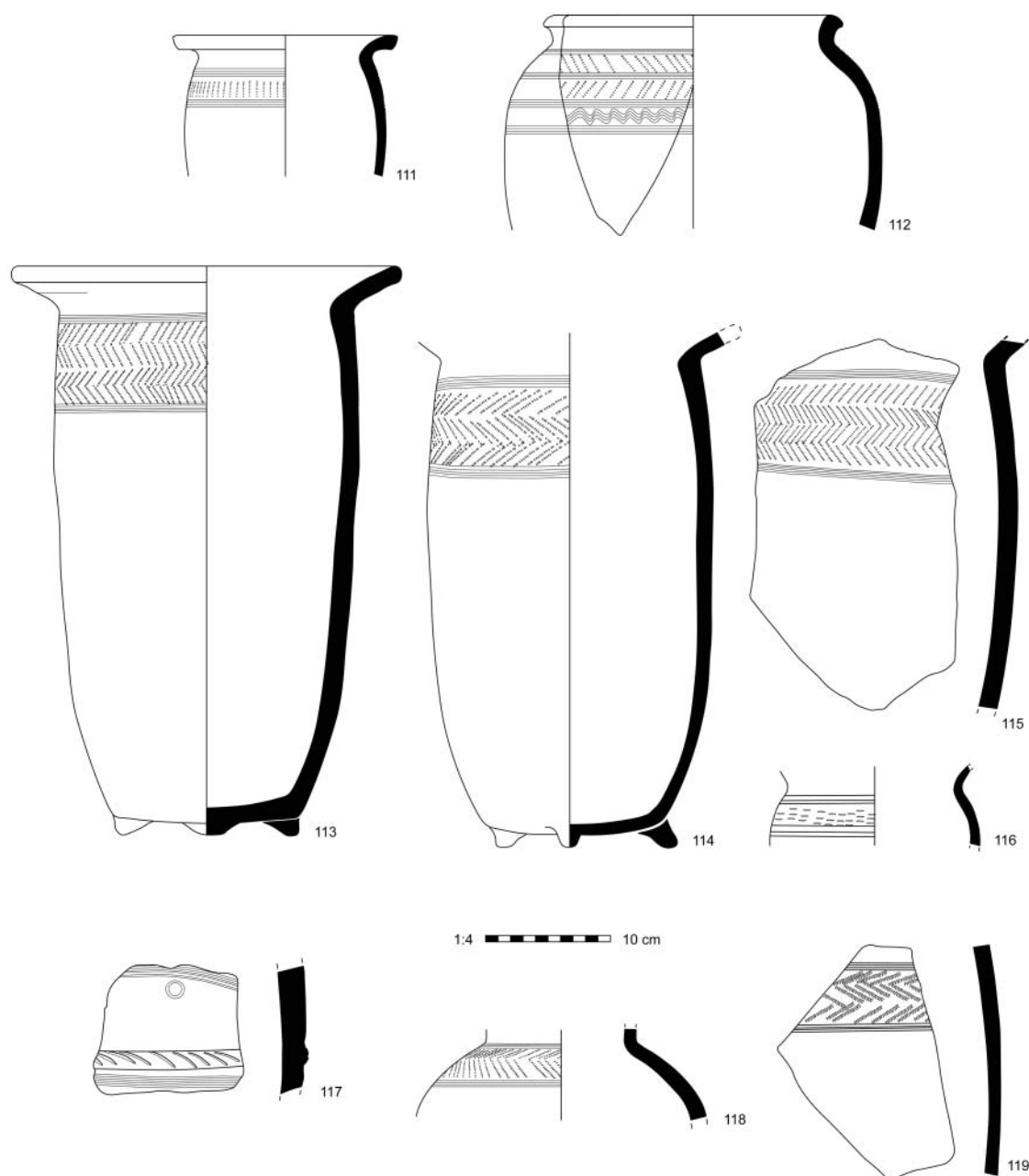


Fig. 24 Jars with bands of comb incision and punctate decoration from Hamoukar Area H. Scale 1:4.

Another group of large jars has simpler rounded flaring rims and a more convex body (Nos. 149–57). Several examples also have lines incised behind the rims (Nos. 154, 156). Two have pairs of pierced holes near the rim (Nos. 151–52); a third has two pairs of pierced holes on opposite sides of the vessel (No. 149). A final group (Nos. 158–60, 185) could hardly be called large but mimic the forms of these large wide-mouthed jars precisely.

The Area H large jars are similar to many other published forms over the entire span of the later third millennium. The best parallels at Mohammed Diyab fall into EJ IIIb levels (Nicolle 2006), while similar forms at Brak are called Akkadian (Oates 2001: Nos. 1394, 1399, 1408, 1412). Two distinctive rim forms were used as diagnostics in the Hamoukar survey as T7/14 and T7/15.

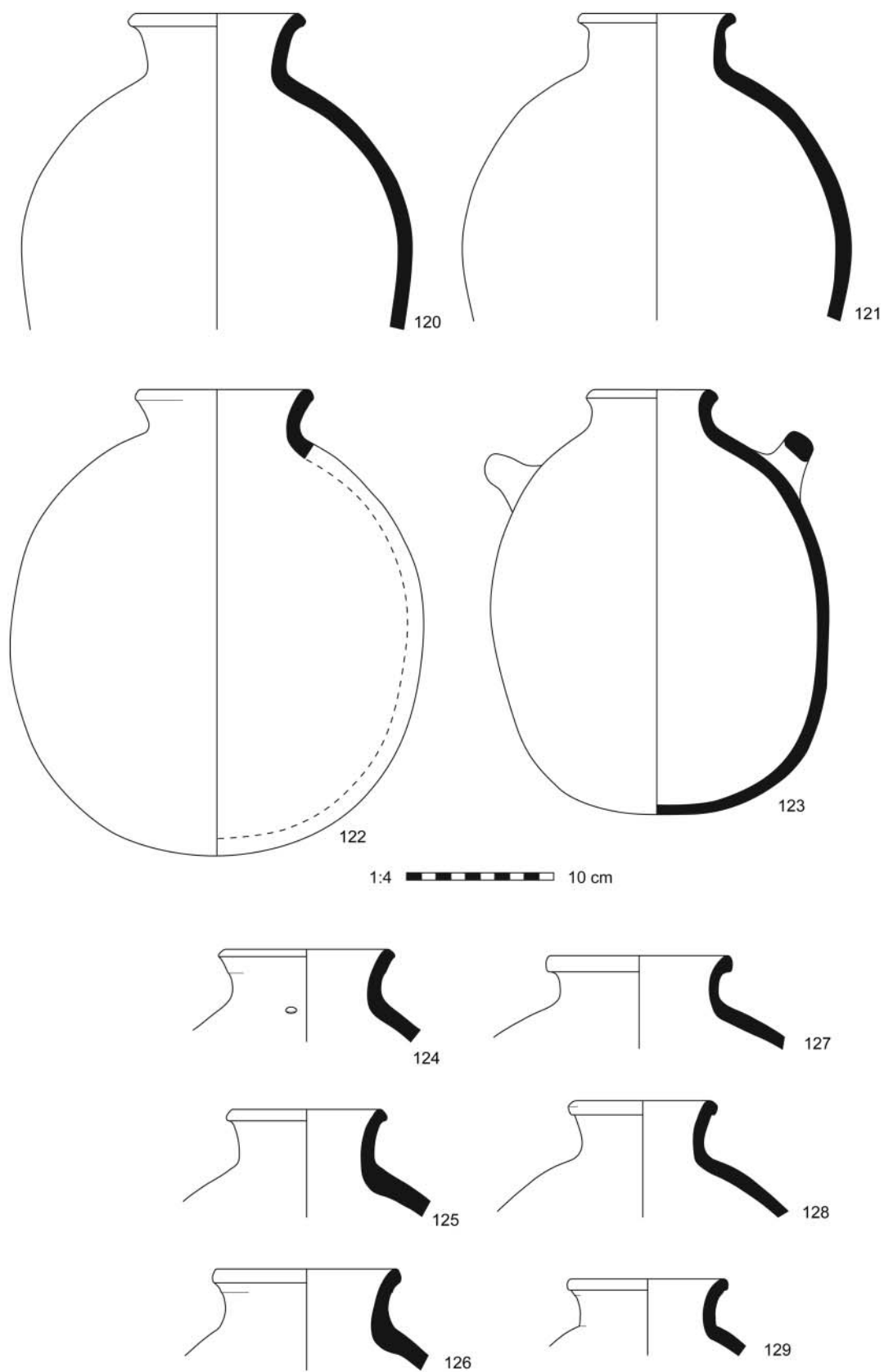


Fig. 25 Medium necked jars from Hamoukar Area H. Scale 1:4.

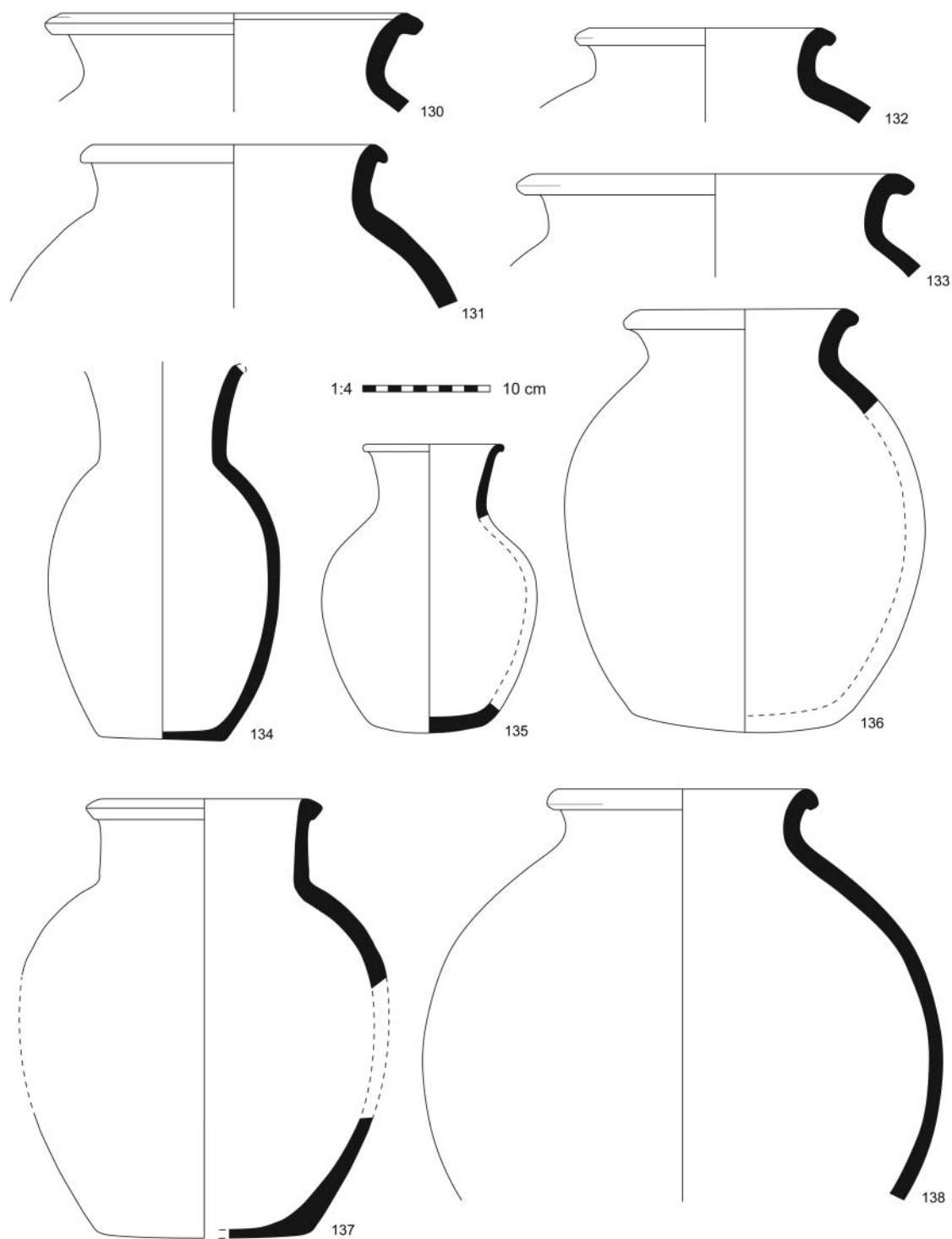


Fig. 26 Medium to large necked jars from Hamoukar Area H. Scale 1:4.

#### 11. Cooking pots (Fig. 28 Nos. 161–74)

The cooking vessel form common in Area H, the other lower town trenches and across the site's surface is a round-bodied pot with a short, wide neck and a variable rim that in its most common form is approximately triangular (especially Nos. 164, 168, and 170). Vessel body sherds were very friable and difficult to reconstruct; however, the absence of any carinations among the body sherds



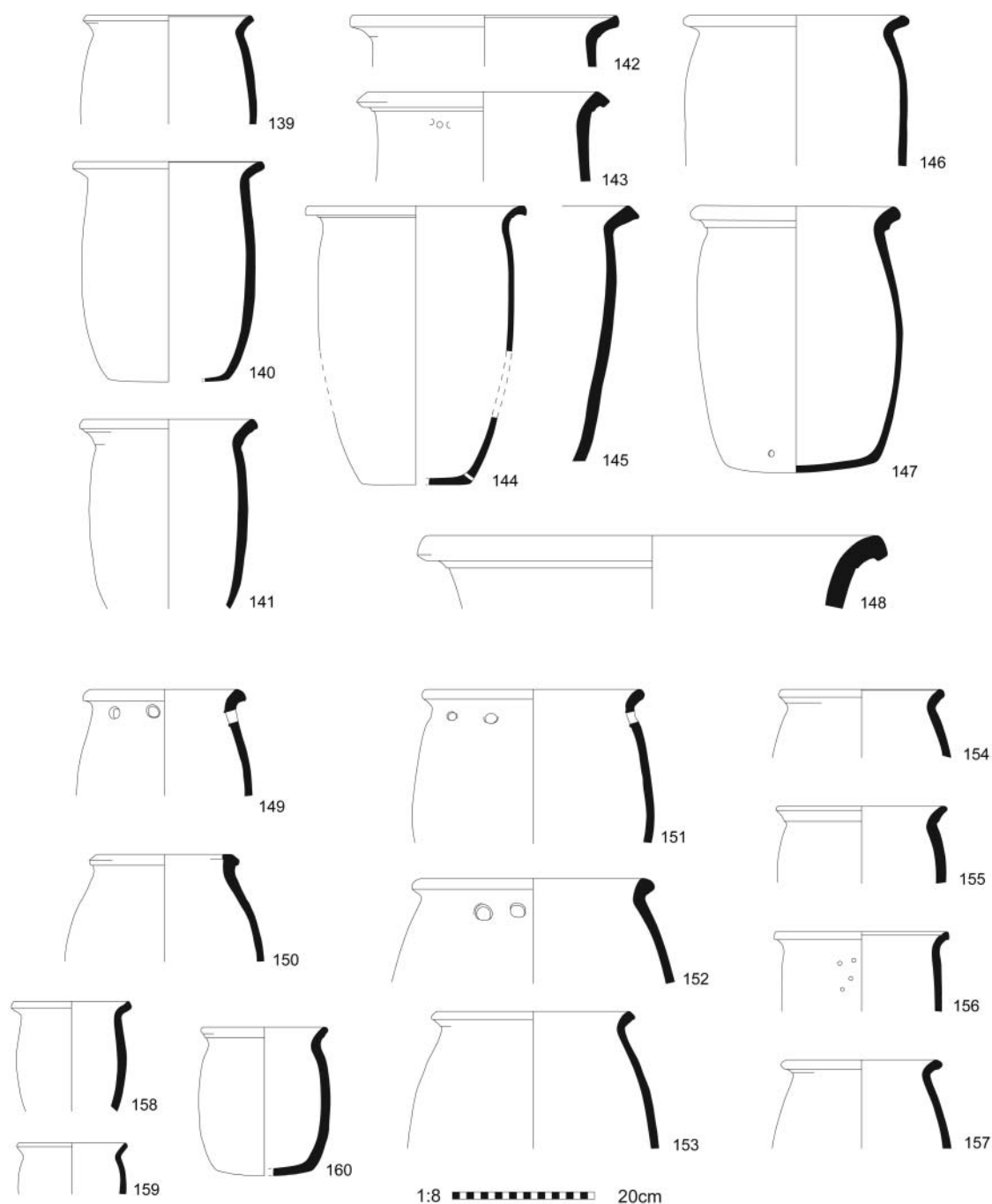


Fig. 27 Large wide-mouthed urns from Hamoukar Area H. Scale 1:8.

makes it certain that bases are rounded. Most rims measured 20–30 cm in diameter, with a smaller group at 10–15 cm. Surface colours range from orange to dark brown; several examples were burnished and many were blackened by direct exposure to fire. The vessels were tempered with abundant amounts of fine to medium dark grit but also included common chaff temper.

Akkadian and post-Akkadian examples at Brak (Oates 2001: Nos. 841, 1670–73) are of an intermediate size compared to the two Area H sizes. Similar examples from Mohammed Diyab come from both Akkadian and post-Akkadian levels (Nicolle 2006: fig. 7–22 No. 3). This form was used as THS survey diagnostic T7/17.

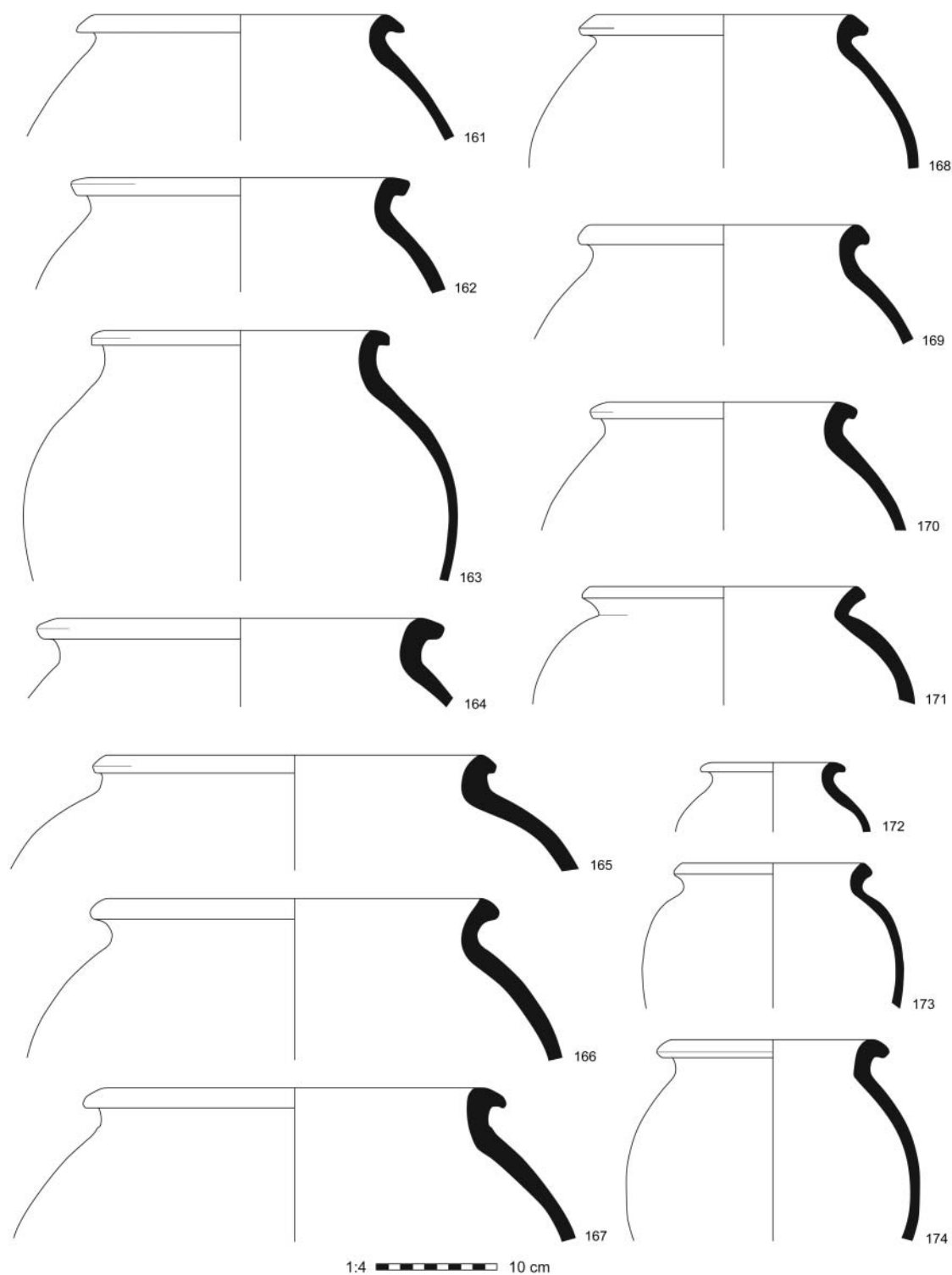


Fig. 28 Cooking pots from Hamoukar Area H. Scale 1:4.

*12. Small globular jars (Fig. 29 Nos. 175–89)*

Area H produced an abundance of small vessels with round or bag-shaped bodies and short necks. Some had simple everted rims (Nos. 175–84) while others were rimless or had simple flaring necks (Nos. 186–89). These small vessels show a broad range of surface colours, treatments, and

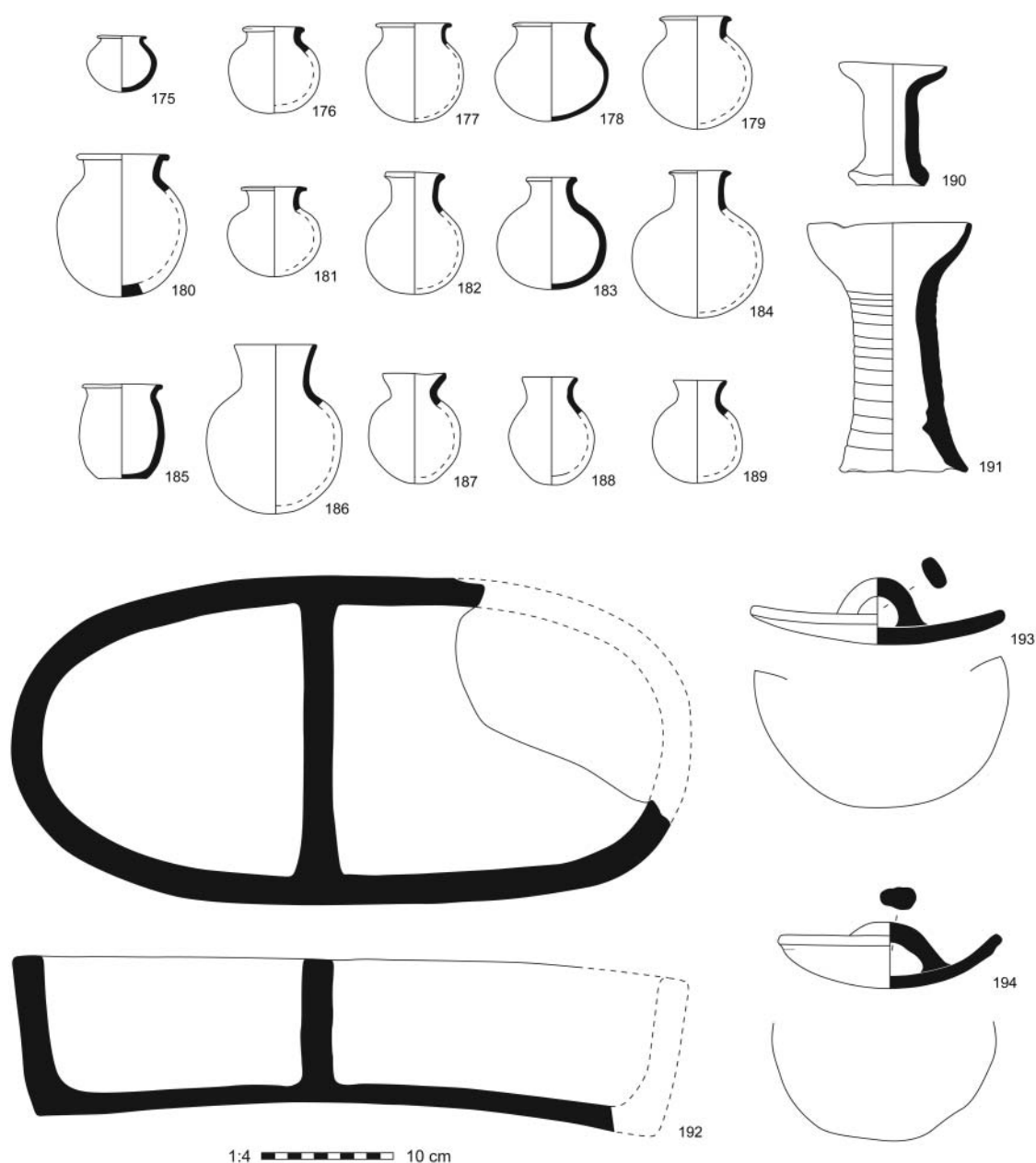


Fig. 29 Miniature and miscellaneous vessels from Hamoukar Area H. Scale 1:4.

fabrics. No. 184 was painted black; No. 175 had traces of red-brown paint. Because many examples were recovered completely intact, their fabrics could only be described by close observation of their exterior surfaces; however, many had fine to medium chaff temper. One stoneware example was recovered (No. 181).

Small globular jars are common in Akkadian levels at Mohammed Diyab (Oates 2001: Nos. 1372–80, Nicolle 2006: figs. 7–17 Nos. 5–6) and Akkadian and post-Akkadian levels at Brak (Oates 2001: figs. 424, 450).

### 13. Cylindrical open-ended ceramic objects (Fig. 29 Nos. 190–91)

The two objects in this group are both hollow cylindrical objects with an upper end in the shape of a flattened bell, a narrow middle, and a roughly finished base. The smaller example (No. 190) is

buff and chaff tempered; the larger example (No. 191) is possibly slipped, has spiral incisions around its midsection, and is tempered with fine lime (Fig. 15). The function of these objects is open to question. The smaller example might have served as a stand for any of the small globular vessels discussed above, or the beaded rim cups (Nos. 1–15). The larger example is too big for most of those forms.

An alternative possibility is that these objects were percussion instruments. No. 190 is too small to have produced much sound, but if a skin were stretched across its upper opening No. 191 would have been capable of projecting vibrations. Its size and shape is remarkably similar to clay drums offered for sale in the *suq* in Qamishli in the late 1990s and early 2000s. No. 191 was the only example of its kind found at Hamoukar, but at least a dozen examples of very similar size and shape to No. 190 were found in Area C in the 2000 field season.

#### 14. Large compartmented tray (Fig. 29 No. 192)

An oval tray subdivided into two compartments was found in L.21 near the south section.

#### 15. Concave lid or tannur implement (Fig. 29 Nos. 193–94)

These two objects consist of a circular concave plate or bowl with a handle applied to the centre (Fig. 16). In colour and fabric they are similar to the cooking pots: orange to brown surfaces with abundant dark grit and chaff temper. The underside of one example (No. 194) was blackened from exposure to fire.

On the basis of the fabric these objects are suited for exposure to heat, and the handle suggests a use as a lid. Most of the cooking pots from Area H, however, have diameters too large for these two objects. A second possibility is that these were tools for use with the *tannur* ovens, in particular to press dough up against the heated interior surface. In the villages of the area today this is done using a pillow, but it is easy to imagine how it could be done with one of these handled implements. Adding support to this second possibility is the findspot of No. 194 next to the *tannurs* in L.12.

This form appears to be an uncommon one, but at least one parallel from Brak was found in the late Akkadian level of Area TC J, where it is interpreted as a lid (Emberling and McDonald 2001: fig. 14 No. 8).

### IV. Conclusions

#### *Architecture*

From the preceding discussion it is possible to draw some conclusions regarding general features common to architecture at the site. The sample of domestic architecture shares similar elements of planning and construction, with the use of a possible idealised ground plan and distinct local concepts in the use of the built environment; these include large, easily accessed activity areas, streets and shared space. Reinforcing the overall impression of a prosperous community, with a mature urban environment sharing an established code of spatial practices and behaviours, is the effort expended to construct sizeable domestic residences with labour and resource-intensive architectural features such as the common use of baked brick, distinct areas pertaining to certain activities and efficient drainage.

Area H provides a vital snapshot of the built environment and nature of domestic housing in a large settlement in the terminal third millennium BC. The construction of this built environment is not simply a reflection of the period, but also the distinct expression of a cultural idiom in a site with no topographic constraints. The environment does however play a subtle role, with the high water-table influencing the common construction of wells and courtyards and so affecting the morphology of the built environment. On the whole, however, we see patterns generated by social practices rather than by topographic necessity. The houses of Area H do offer opportunities for a regional comparison of the manner of construction and use of materials within a common architectural style, that of the central-courtyard house, in this period and region. Area H was home to a manifestly prosperous community, although variability in the range of house size and presumably individual household economic resources is evident and our general view is distorted by the large, complete house in the centre of the area. There are established principles of spatial use—the courtyard and activity areas



for example—and cultural consistency in the organisation and use of urban space across the site. All the areas excavated share common architectural styles and ceramic assemblages.

To date, excavations at Hamoukar have provided no written texts or distinct expressions of craft or artisan activities on a large scale. The economic base of so apparently prosperous and large a community, apart from agricultural, remains uncertain, though the large activity and animal-penning areas, multiple associated *tannurs* and large quantities of ceramics suggest thriving household economies. The large activity areas imply a highly developed level of domestic economy, with household production being an important facet and building block of the local economy.

### *Chronology*

The majority of the ceramic parallels for Area H vessels come from the well published corpus from Tell Brak, particularly from levels the excavators attribute to the Akkadian or EJ IV period (Brak Phase M). These parallels include stoneware and common ware beakers, small bottles and most of the medium to large storage-jar forms. Other Area H types have parallels that were in use in multiple ceramic phases of the later third millennium BC, in particular the large bowls and deep basins.

A simple Akkadian date is complicated by the relative abundance of comb-incised decoration. Although known from Akkadian levels at Brak and elsewhere it is more common in post-Akkadian levels, especially at Brak, Chagar Bazar, Mohammed Diyab and Nineveh. Of particular significance is that the most common patterns of comb-incised decoration in Area H are strongly concentrated in post-Akkadian levels at Tell Brak, the site with the most extensive ceramic corpus (Oates 2001: 164–65, 170). However, Area H lacks other forms from these post-Akkadian assemblages, particularly dark-rimmed orange bowls, radial-patterned burnishing, shoulder corrugation on large jars and high carinated bowls, to name a few. For these reasons, we see the Area H assemblage as intermediate between the “Akkadian” assemblages best known from the destruction levels at Brak, and the post-Akkadian assemblages at Brak Phase N, Chagar Bazar Area D, Mohammed Diyab Phase MD-X and Nineveh KG VIII–VI. A further complication is the likelihood that Hamoukar’s assemblage has certain local peculiarities not found at other sites or in neighbouring regions. It is for this reason that we have limited the geographical scope of our comparisons. A preliminary absolute dating for the final occupation of Area H, based on this preliminary evaluation of its ceramic inventory, would be in the twenty-first century or early twentieth century BC.

### *Area H summary and conclusions*

Area H hosted a residential community on Hamoukar’s lower town at the end of the third millennium BC. Its structures were of average size when compared with other northern Mesopotamian houses, but they show considerable wealth in the form of baked brick pavements and door thresholds. These features are found in the large house H I but also in several of the smaller neighbouring houses, which suggests that the residents of the area were well-to-do and could afford to expend resources on costly baked brick. Based primarily on the architecture, possible status differences may have existed between the residents of the large house H I and the others, but these differences appear not to have been great. We have argued in more detail elsewhere that H I was home to a locally prominent family that maintained its elevated status by hosting communal eating and drinking events in the well-appointed reception room L.6; such events would have been critical in reinforcing the interpersonal relationships that were the basis for the local status hierarchy (Ur and Colantoni 2010).

The economic bases of the households in Area H are difficult to determine, despite the well-preserved architecture and abundant artefacts. Indicators of administration or specialised manufacturing are completely lacking. The architectural features and ceramics give no hint of anything other than basic household activities: cooking, bread-baking, storage, serving and probably animal husbandry, if our interpretation of the external paved surfaces is correct. If the residents of Area H derived their livelihoods from agriculture and pastoral activities, as seems likely, it is clear that such activities were capable of sustaining a high standard of living in an urban context.

Area H represents a tiny fraction of Hamoukar’s lower town settlement, so any general conclusions must be considered highly preliminary. Nonetheless, on present evidence it appears to be similar in

many respects to smaller lower town exposures at Areas C and E, which may also have had similar patterns of residential architecture.

Area H and the other late third-millennium lower town areas also appear to have suffered a similar fate. All have a high quantity of broken but restorable pottery on their final surfaces, a characteristic of a rapid rather than a planned abandonment. When combined with the evidence for violence in Area H and burning in Area C, it appears that Hamoukar came to a sudden end. The history of northern Mesopotamia in the third millennium is just beginning to be written, but it is clear that it was a time of interregional conflict (see most recently Sallaberger 2007). At almost one hundred hectares, Hamoukar was a large and successful urban settlement for half a millennium; the Area H excavations suggest that its demise was sudden and violent, and at the hands of human agents rather than climatic events.

#### *Descriptions to pottery figures*

*Fig. 17. Beaded rim cups and stoneware beakers from Hamoukar Area H. Scale 1:4.*

1. Yellow-green surfaces and core; fine sandy fabric. Rim dm 9.6 cm. Locus 6 NW corner near bench. C.276.
2. Yellow surfaces, green core; fine sandy fabric. Rim dm 9.0 cm. Locus 19. C.3109.5.
3. Yellow-green surfaces and core; common fine chaff. Rim dm 8.0 cm. Locus 19. C.3109.3
4. Yellow-green surfaces; fine slightly sandy fabric. Intact. Rim dm 9.0 cm; base dm 4.5 cm. Locus 6. C.535.
5. Pale yellow-green surfaces and core; exterior wet smoothed; fine slightly sandy fabric. Rim dm 9.0 cm. Locus 6 NW corner near bench. C.277.7
6. Yellow surfaces, yellow-green core; fine sandy fabric. Rim dm 9.0 cm. Intact. Locus 6 NW corner near bench. C.277.8
7. Yellow surfaces and core; fine sandy fabric. Intact. Rim dm 9.5 cm. Locus 9 SW corner. C.293.1
8. Yellow-green surfaces and core; fine sandy fabric. Rim dm 7.9 cm. Locus 15. C.1952.
9. Pale green surfaces, green core; fine sandy fabric. Rim dm 12.0 cm. Locus 19. C.2953.
10. Yellow surfaces, green core; fine sandy fabric. Intact. Rim dm 9.6 cm. Locus 6 SW corner. C.271.
11. Yellow surfaces, exterior wet smoothed. Intact. String-cut base. Intact. Rim dm 6.4 cm; base dm 4.2 cm. Locus 19. C.3416.1.
12. Yellow-green surfaces, exterior wet smoothed; fine sandy fabric. Intact. Rim dm 6.2 cm; base dm 3.9 cm. Locus 31. C.3411.
13. Green surfaces and core; fine sandy fabric with occasional fine lime. Intact. Rim dm 5.7 cm; base dm 3.3 cm. Locus 19 SW center. C.3280.
14. Blackened grey surfaces; exterior wet smoothed; temper not visible. Intact. Rim dm 6.4 cm; base dm 3.4 cm. Locus 19 center. C.2352.
15. Yellow-green surfaces and core; occasional fine lime, fine sandy fabric. String-cut base. Intact. Rim dm 6.0 cm; base dm 3.9 cm. Locus 19 S center. C.2355.2.
16. Pale yellow to buff surfaces and core; fine sandy fabric. Rim dm 11.6 cm. Locus 7. C.3273.
17. Pale yellow surfaces and core; sandy fabric with common fine to medium chaff temper. Rim dm 11.3 cm; base dm 6.0 cm. Locus 31. C.3427.
18. Yellow-green surfaces and core; common fine lime; pronounced external wheel striations. Rim dm 14.0 cm; base dm 6.0 cm. Locus 29. C.3056.
19. Yellow and pink horizontally streaked surfaces; no visible temper. Rim dm 14.0 cm. Locus 11. C.1985.1.
20. Pale grey to blue-grey surfaces with pale yellow horizontal streaks, blue-grey core; no visible temper. Discolouration around rim from stacked firing. Rim dm 16.0 cm; base dm 6.8 cm. Locus 22. C.2863.
21. Blue-grey surfaces with yellow horizontal streaks, blue-grey core; no visible temper. Rim dm 11.2 cm; base dm 5.0 cm. Vessel slightly warped. Locus 19 SW corner. C.3141.2.
22. Pink surfaces with pink to red horizontal streaks on exterior, dark red horizontal streaks on interior, red-pink core. Rim dm 14.0 cm; base dm 6.1 cm. Locus 6. C.536.

23. Grey exterior, grey interior with yellow horizontal streaks; no visible temper. Intact; rim slightly warped. Rim dm 10.0 cm; base dm 4.3 cm. Locus 17. C.2880.
24. C.2837.
25. Pale red exterior, yellow interior with horizontal red streaks, pale red core; no visible temper. Rim dm 12.2 cm, base dm 5.8 cm. Locus 6 NW corner near bench. C.277.11.
26. Pale green slightly vitrified surfaces and core; rare fine lime temper, semi-stoneware. Rim dm 12.5 cm; base dm 6.6 cm. Locus 17. C.1701.
27. Grey surfaces with yellow horizontal streaks, blue-grey core; no visible temper. Rim dm 8.5 cm. Locus 6. C.1431.
28. Pale grey surfaces with yellow horizontal streaks, blue-grey core; no visible temper. Rim dm 9.5 cm; base dm 4.0 cm. Locus 6. C.291.1.
29. Blue-grey surfaces and core; no visible temper. Base dm 2.7 cm. Locus 1. C.1746.1.

*Fig. 18. Beakers from Hamoukar Area H. Scale 1:4.*

30. C.3422.
31. Yellow surfaces and core; fine sandy fabric with occasional fine lime. External wheel striations. Rim dm 13.6 cm; base dm 5.5 cm. Locus 6 NW corner near bench. C.277.1.
32. Yellow-green surfaces and core; sandy fabric with occasional medium chaff temper. External wheel striations. Rim dm 15.2 cm; base dm 6.8 cm. Locus 6 NW corner near bench. C.277.3.
33. Yellow-green surfaces and core; common fine-medium chaff, occasional sand. External wheel striations. Rim dm 10.2 cm; base dm 5.0 cm. Locus 6 NW corner near bench. C.277.4.
34. Pale yellow-green surfaces and core; wet smoothed exterior; fine sandy fabric with rare medium chaff temper. Rim dm 9.6 cm; base dm 4.9 cm. Locus 6 NW corner near bench. C.277.2.
35. Grey-green surfaces and core; occasional to common fine lime temper. Overfired, with semi-vitrified exterior. Rim dm 11.6 cm; base dm 6.0 cm. Locus 19 NW quadrant. C.3233.
36. Yellow-green surfaces and core; fine sandy fabric. Rim dm 13.5 cm. Locus 14. C.1962.
37. Pale yellow surfaces and core; exterior wet smoothed; sandy fabric with occasional fine lime temper. String-cut base. Rim dm 11.4 cm, base dm 4.6 cm. Locus 31. C.3423.
38. Yellow to pink-orange exterior, orange-pink interior. Intact. Rim dm 10.0 cm; base dm 4.6 cm. Locus 17. C.1702.
39. Buff surfaces, orange core; sandy fabric with occasional medium lime temper. String-cut base. Rim dm 10.4 cm; base dm 5.0 cm. Locus 25. C.3079.
40. Yellow-green surfaces and core; common fine-medium chaff, occasional fine lime temper. String-cut base. Rim dm 10.8 cm; base dm 4.8 cm. Locus 19. C.3103.
41. Olive green surfaces and core; occasional fine-medium lime temper. Rim dm 13.6 cm; base dm 6.4 cm. Locus 19 SW center. C.3282.
42. Buff to orange exterior, orange interior; occasional fine chaff, sand, and fine lime. Slumped; string-cut base. Rim dm 11.1 cm; base dm 5.2 cm. Locus 19. C.3416.2.
43. Yellow (rim) to orange (base) exterior, yellow interior, pink core; common medium chaff, occasional coarse lime temper. Rim dm 12.0 cm; base dm 5.8 cm. Locus 28 over drain. C.2396.
44. Orange surfaces and core; fine sandy fabric. Rim dm 11.2 cm; base dm 4.7 cm. Locus 19 E side. C.3124.
45. Green surfaces and core; occasional fine chaff and fine lime temper. Rim dm 15.6 cm; base dm 7.2 cm. Locus 20. C.1982.
46. Green surfaces and core; sandy fabric. Frequent exterior wheel striations. Rim dm 15 cm; base dm 7.4 cm. Locus 21. C.2382.
47. Yellow-green surfaces and core; exterior wet smoothed on wheel; sandy fabric with occasional fine lime temper. Rim dm 14.0 cm; base dm 7.0 cm. Locus 19. C.3108.
48. Yellow-green surfaces and core; fine sandy fabric with rare coarse chaff temper. Rim dm 14.4 cm; base dm 6.4 cm. Locus 19. C.3119.
49. Pale yellow surfaces, brown core; fine sandy fabric. Rim dm 25.0 cm. Locus 22 NW corner. C.2811.2.
50. Yellow surfaces, yellow-green core; fine sandy fabric. Rim dm 27.0 cm. Locus 22. C.2860.1

51. Yellow-green surfaces, green core; wet smoothed exterior; no visible temper. Semi-stoneware. Rim dm 21.8 cm; base dm 10.1 cm. Locus 22. C.2860.3.
52. Pale yellow surfaces, green core; fine sandy fabric with occasional fine lime temper. Base dm 10.7 cm. Locus 22. C.2862.2.
53. Pale yellow-green surfaces and core; fine sandy fabric. Base dm 10.6 cm. Locus 22. C.2860.2.

*Fig. 19. Small bowls from Hamoukar Area H. Scale 1:4.*

54. Greyish yellow surfaces, pink core; sandy fabric with occasional fine lime temper. Single horizontal lug handle with two vertical piercings. Rim dm 27 cm, base dm 10.5 cm. Locus 19. C.3279.
55. Grey to dark brown surfaces, grey brown core; common sand and occasional medium lime temper. Rim dm 20 cm. Locus 13. C.1911.
56. Yellow-green surfaces and core; fine sandy fabric with occasional fine lime temper. Rim dm 18 cm. Locus 14. C.1976.5.
57. Yellow-green surfaces, green core; fine sandy fabric. Rim dm 16 cm. Locus 27 near S wall. C.2357.
58. Yellow-green surfaces and core; fine sandy fabric. Rim dm 14.0 cm. Locus 6. C.1410.1.
59. Green surfaces and core; fine sandy fabric with rare medium chaff temper. Rim dm 13.5 cm. Locus 6. C.1410.2.
60. Yellow-green surfaces and core; sandy fabric with occasional fine lime temper. Uneven rim; external wheel striations; finger spiral in center; string-cut base. Rim dm 15.7 cm; base dm 5.8 cm. Locus 31. C.3433.
61. Yellow-green surfaces and core; sandy fabric with rare fine lime. Uneven rim; external wheel striations; finger spiral in center; string-cut base. Rim dm 13.1 cm; base dm 5.4 cm. Locus 31. C.3420.
62. Yellow-green surfaces, green core; occasional to common fine chaff and fine lime temper. Rim dm 15.9 cm; base dm 5.0 cm. Locus 30. C.3205.
63. Yellow surfaces, pink core; common fine-medium chaff. Rim dm 17 cm. Locus 30. C.2374.2.
64. Pale yellow surfaces and core; fine sandy fabric. Rim dm 18.0 cm; base dm 6.0 cm. Locus 19 E side. C.3125.
65. Green surfaces and core; fine sandy fabric with rare medium lime temper. Rim dm 18.8 cm; base dm 6.7 cm. Locus 12. C.2865.
66. Yellow surfaces, yellow-grey core; fine sandy fabric. Wheel striations on interior and exterior. Rim dm 15.8 cm; base dm 5.3 cm. Locus 19 center. C.3287.

*Fig. 20. Greyware bowls and bottles of various fabrics from Hamoukar Area H. Scale 1:4.*

*Grayware Bowls*

67. Grey surfaces, black core with light grey-brown margins; rare medium chaff, occasional sand and fine lime temper. Rim dm 37.0 cm. Locus 9. C.1404.
68. Dark grey burnished surfaces, grey core; fine fabric with occasional sand temper. Rim dm 30 cm. Locus 10. C.3301.
69. Pale grey surfaces with traces of burnishing on exterior, brown core; hard fine sandy fabric. Rim dm 18.0 cm. Locus 21. C.1724.
70. Brown lightly burnished surfaces, black core with orange margins. Fine sandy fabric with occasional fine lime temper. Rim dm 29.0 cm. Locus 19 S center. C.2355.1.
71. Grey lightly burnished surfaces, black core; occasional fine chaff and sand temper. Rim dm 48 cm. Locus 19. C.3109.4.
72. Pale grey surfaces with traces of burnishing, dark grey core; common sand and fine lime temper. Rim dm 41 cm. Locus 27 sherd paving. C.2397.1
73. Pale grey burnished surfaces, dark grey core; common fine-medium chaff and sand temper. Rim dm 38 cm. Locus 19. C.2847.3.

*Various Bottles*

74. Pale green wet smoothed surfaces; occasional medium chaff visible in exterior surface. Intact. Rim dm 5.5 cm. Locus 19 near W door. C.1995.



75. Yellow-green surfaces and core; fine dense slightly sandy fabric. Locus 19 W center. C.3275.
76. Green surfaces and core; fine sandy fabric with occasional fine lime temper. Rim dm 4.8 cm. Locus 19 SW corner. C.3141.1.
77. Light grey vitrified exterior, light grey interior with horizontal yellow streaks, light grey core; no visible temper. Rim dm 4.7 cm. Locus 31. C.3415.
78. Pale orange surfaces and core; occasional fine lime temper. Rim dm 2.1 cm. Locus 6. C.291.2.
79. Yellow-green surfaces and core; common medium chaff temper. Slightly irregular in section. Rim dm 6.0 cm. Locus 6. C.1409.
80. Orange surfaces, thick black core; abundant medium grit, rare medium-coarse chaff temper. Rim dm 31 cm. Locus 15. C.3286.
81. Green surfaces and core; sandy overfired fabric with occasional medium chaff temper. Highly uneven, non-symmetrical. Locus 1. C.3116.
82. Pale yellow surfaces and core; sandy fabric with rare fine chaff temper. Horizontal finger grooves on exterior. Rim dm 6.2 cm. Locus 13. C.1910.4.
83. Yellow smoothed exterior surface, yellow core; common fine lime temper. Locus 22. C.1735.
84. Pale yellow surfaces and core; common fine chaff, occasional fine lime temper. Rim dm 9 cm. Locus 19 NE quadrant. C.3265.1.
85. Yellow surfaces, pink core; common medium chaff and occasional medium lime temper. Locus 30. C.3226.

*Fig. 21. Large bowls or basins from Hamoukar Area H. Scale 1:4.*

86. Yellow surfaces and core; common medium chaff temper. Applied horizontal lug handle. Unevenly made. Rim dm 40 cm. Locus 19? C.2848.
87. Pale yellow surfaces, pink core; sandy fabric with occasional-common medium chaff temper. Applied horizontal lug handle. Rim dm 25 cm. Locus 11. C.1912.2.
88. Yellow surfaces, green core; common-frequent medium chaff, occasional medium lime temper. Rim dm 38 cm. Locus 19 center. C.3297.1.
89. Locus 14. C.1959.

*Figure 22. Deep basins from Hamoukar Areas E and H. Scale 1:4.*

90. Rim dm 30.3 cm. Locus 9. C.3135.
91. Pale yellow surfaces, buff-orange core; common-frequent medium chaff temper. Complete. Rim dm 32 cm; base dm 22 cm. Locus 19 W center. C.3149.
92. Yellow surfaces, brown core; common-frequent medium chaff temper. Complete. Rim dm 33 cm; base dm 24 cm. Locus 19. C.3132.
93. Pale yellow surfaces, orange core; common medium chaff, occasional fine lime temper. Rim dm 30 cm. Locus 11 NW corner. C.1928.4.
94. Buff surfaces, brown core; wet smoothed exterior; common-frequent medium chaff temper. Rim dm 33 cm. Locus 19 N end. C.2393.2.
95. Area E Locus 7. C.2897.3.
96. Area E Locus 2 Pit 5. C.1462.1.
97. Yellow surfaces, pink-orange core; frequent medium chaff temper. Rim dm 25 cm. Locus 3. C.516.1.
98. Area E Locus 1. C.321.
99. Rim dm 47 cm. Locus 19 SW corner. C.3133.

*Figure 23. Jars with wavy bands of comb incision from Hamoukar Area H. Scale 1:4.*

100. Yellow-green surfaces and core; common fine-medium chaff temper. Three-point bands of comb incision. Rim dm 26 cm. Locus 22. C.2862.1.
101. Pale yellow surfaces, pink core; common medium chaff temper. Four-point bands of comb incision. Horizontal scraping inside rim, vertical scraping beneath rim interior. Rim dm 23 cm. Locus 11. C.2874.

102. Yellow surfaces, orange core; common medium chaff, occasional fine-medium lime temper. Three-point bands of comb incision. Rim dm 14 cm. Locus 25. C.3081.1.
103. Pale yellow surfaces, pink core; common-frequent fine-medium chaff, occasional fine-medium lime temper. Four-point bands of comb incision; interior vertically scraped beneath rim. Rim dm 25 cm. Locus 10. C.2320.
104. Yellow-green surfaces and core; common medium-coarse chaff temper. Three-point bands of comb incision. Rim dm 20 cm. Locus 19. C.3109.1.
105. Pale yellow surfaces, green core; common medium chaff, occasional fine lime temper. Five-point bands of comb incision. Locus 19. C.2870.
106. Yellow surfaces and core; occasional medium chaff and fine-medium lime temper. Three-point bands of comb incision. Rim dm 20 cm. Locus 14. C.1961.2.
107. Yellow surfaces, pink core; common fine chaff, occasional fine-medium lime temper. Five-point bands of comb incision. Rim dm 15.5 cm. Locus 25. C.3058.1.
108. Pale yellow surfaces, pink core; common fine-medium chaff. Four-point bands of comb incision. Nearly intact. Rim dm 14.5 cm; base dm 7.1 cm. Locus 6 SW corner. C.295.
109. Pale yellow surfaces, pink core; common fine-medium chaff temper. Four-point bands of comb incision. Rim dm 17.8 cm. Locus 22. C.1730.
110. Pale yellow surfaces and core; frequent medium chaff. Three-point bands of comb incision; interior vertically scraped beneath rim. Base dm 10 cm. Locus 29. C.3240.

*Figure 24. Jars with bands of comb incision and punctate decoration from Hamoukar Area H.*

*Scale 1:4.*

111. Pale yellow surfaces, pink-orange core; common fine chaff and occasional medium lime temper. Four-point bands of comb incision with 9-point vertical punctate. Rim dm 17 cm. Locus 17. C.1712.
112. Pale yellow surfaces and core; common fine chaff, occasional fine-medium lime temper. Four-point bands of comb incision with 9-point diagonal punctate. Rim dm 22 cm. Locus 11. C.1926.2.
113. Pale yellow surfaces, pink core; common medium-coarse chaff. Four-point bands of comb incision with 13-point diagonal punctate; interior horizontally scraped beneath rim carination. Rim dm 30 cm. Locus 11 SW corner. C.1914.
114. Yellow-green surfaces and core; common medium chaff temper. Five-point bands of comb incision with three rows of 16-point diagonal punctate. Base dm at carination 14 cm. Locus 17. C.1707.
115. Yellow surfaces, pink-orange core; common medium chaff temper. Five-point bands of comb incision with four rows of 13-point diagonal punctate. Locus 22 NW corner. C.2812.
116. Yellow surfaces, buff core; fine sandy fabric with occasional fine chaff temper. Three-point bands of comb incision with horizontal punctate slashes. Locus 1. C.1746.2.
117. Yellow surfaces and core; frequent fine-medium chaff. Six-point bands of comb incision with diagonally slashed raised ridge and impressed circle. Locus 13 S of Tannur 1. C.2814.3.
118. Yellow surfaces, pink core; common medium chaff temper. Five-point bands of comb incision with 2 rows of 12-point diagonal punctate. Dm 12 cm at base of neck. Locus 19. C.2733.
119. Yellow surfaces, pink core; common medium chaff. Four-point bands of comb incision with 3 rows of 16-point diagonal punctate. Locus 11. C.1909.2.

*Figure 25. Medium necked jars from Hamoukar Area H. Scale 1:4.*

120. Yellow exterior, buff interior, pink core; common medium-coarse chaff. Rim dm 11 cm. Locus 21. C.1732.
121. Pale yellow surfaces, yellow-green core; common-frequent medium chaff, occasional fine-medium lime temper. Rim dm 10 cm. Locus 12 NW corner. C.2877.
122. Pale yellow surfaces, orange core; common medium chaff. Rim dm 22 cm. Locus 12 between *tannurs*. C.2845.
123. Yellow-green surfaces and core; common fine-medium chaff, occasional fine-medium lime temper. Applied horizontal handles; irregular scraped body. Rim dm 8 cm. Locus 14. C.1961.1.

124. Yellow-green surfaces and core; common-frequent medium chaff. Rim dm 11 cm. Locus 19. C.2847.2
125. Yellow surfaces, pink core; common fine-medium chaff, occasional fine lime temper. Rim dm 10 cm. Locus 19. C.3297.2.
126. Yellow-green surfaces and core; common-frequent medium chaff. Rim dm 12 cm. Locus 19 N end. C.2393.4.
127. Pale yellow surfaces, pink-orange core; common medium chaff. Rim dm 12 cm. Locus 19 SW corner. C.3140.
128. Yellow-green surfaces and core; common-frequent medium chaff temper. Rim dm 9 cm. Locus 11 NW corner. C.1928.2.
129. Yellow surfaces, buff core; common medium chaff temper. Rim dm 10.3 cm. Locus 19 W side. C.3277.3.

*Figure 26. Medium to large necked jars from Hamoukar Area H. Scale 1:4.*

130. Yellow surfaces, buff core; common medium-coarse chaff, occasional fine-medium lime temper. Rim dm 27 cm. Locus 19 E side. C.3130.2.
131. Yellow-green surfaces, pink core; common medium chaff temper. Rim dm 22 cm. Locus 19. C.2847.1.
132. Yellow-green surfaces and core; common-frequent medium chaff temper. Rim dm 18 cm. Locus 19 S center. C.3146.
133. Yellow-green surfaces, buff core; common medium chaff temper. Rim dm 28 cm. Locus 19 E side. C.3130.3.
134. Pale yellow surfaces, pink core; common fine-medium chaff temper. Exterior wet smoothed. Rim dm 9.6 cm. Locus 19. C.3278.
135. Yellow surfaces, pink-orange core; occasional-common sand temper. Intact. Rim dm 10.4 cm. Locus 18. C.1938.
136. Pale yellow to buff surfaces; common-frequent medium chaff temper. Intact. Rim dm 16 cm. Locus 17. C.1703.
137. Pale yellow-green surfaces, buff core; frequent medium chaff temper. Rim dm 16 cm. Locus 6. C.291.3.
138. Yellow surfaces and core; common-frequent medium chaff temper. Rim dm 19.5 cm. Locus 19 W side. C.3150.

*Figure 27. Large wide-mouthed urns from Hamoukar Area H. Scale 1:8.*

139. Yellow surfaces, green core; common fine-medium chaff temper. Incised line behind rim. Rim dm 23 cm. Locus 19 center. C.3297.4.
140. Green surfaces, black core with orange margins; frequent medium chaff temper. Incised line behind rim. Rim dm 26 cm. Locus 19. C.3131.
141. Pale yellow surfaces and core; common medium chaff temper. Rim dm 24 cm. Locus 19. C.2846.
142. Yellow surfaces, pink core; common fine-medium chaff, occasional medium lime temper. Rim dm 37 cm. Locus 19 N end. C.2393.3.
143. Yellow surfaces and core; hard sandy fabric with occasional fine lime temper. Impressed circles. Rim dm 32 cm. Locus 19. C.3101.1.
144. C.2392.
145. C.1927.1.
146. Pale yellow surfaces and core; common medium chaff temper. Vertical scraping on interior. Rim dm 30 cm. Locus 19. C.3109.2.
147. Yellow-green surfaces and core; common medium chaff. Complete; warped and irregular; small hole near base. Rim dm 27.2 cm. Burial 1. C.2892.
148. Pink surfaces and core; common medium chaff and sand temper. Rim dm 63 cm. Locus 19 W side. C.3277.4.

149. Yellow surfaces and core; common medium chaff temper. Two pairs of pierced holes on opposite sides of vessel. Rim dm 20.5 cm. Locus 31. C.3425.1.
150. Pale yellow surfaces, green core; common medium chaff temper. Rim dm 18 cm. Locus 27. C.2829.1.
151. Green surfaces and core; frequent medium chaff, common fine lime temper. Two pierced holes; uneven rim. Rim dm 30 cm. Locus 19 W side. C.3277.1.
152. Pink to buff surfaces, green core; common fine-medium chaff, occasional fine-medium lime temper. Two pierced holes; uneven rim. Rim dm 31 cm. Locus 19 E side. C.3126.
153. Green surfaces and core; frequent medium chaff, occasional fine-medium lime temper. Overfired. Rim dm 27 cm. Locus 19 near door to Locus 18. C.2358.
154. Yellow surfaces and core; common fine chaff temper. Incised line inside rim. Rim dm 22 cm. Locus 11 SW corner. C.1916.1.
155. Yellow surfaces, buff core; frequent medium chaff temper. Rim dm 23 cm. Locus 19 center. C.3296.1.
156. Yellow surfaces, pink core; common-frequent medium chaff. Impressed circles. Rim dm 24 cm. Locus 19 E section. C.2886.
157. Pale yellow exterior, orange-pink interior and core; common medium chaff. Vertical scraping on interior. Rim dm 21 cm. Locus 19 center. C.3297.3.
158. Pale yellow surfaces, pink core; common medium chaff temper. Rim dm 16 cm. Locus 19 NE. C.3265.2.
159. Pale yellow surfaces, yellow-green core; common medium chaff temper. Rim dm 15 cm. Locus 19. C.2876.1.
160. Pale yellow surfaces, pink core; common-frequent medium chaff temper. Interior vertically scraped beneath rim. Rim dm 17 cm. Locus 25. C.3206.

*Figure 28. Cooking pots from Hamoukar Area H. Scale 1:4.*

161. Orange surfaces, black core; abundant medium-coarse dark grit temper. Rim dm 24 cm. Locus 19 W side. C.3147.
162. Orange-brown surfaces, thick black core; abundant fine-medium dark grit, occasional medium chaff. Rim dm 25 cm. Locus 6. C.1411.2.
163. Orange surfaces with traces of sooting, black core; abundant fine-medium dark grit, common medium chaff temper. Rim dm 22 cm. Locus 13. C.2814.2.
164. Orange surfaces, thick black core; abundant fine-medium dark grit, common medium chaff temper. Rim dm 30 cm. Locus 19 N end. C.2393.1.
165. Orange-brown surfaces, thick black core; abundant fine-medium dark grit, occasional medium chaff temper. Rim dm 31 cm. Locus 6. C.1411.1.
166. Orange surfaces with traces of sooting, black core; abundant fine-medium dark grit, common medium chaff temper. Rim dm 22 cm. Locus 13. C.2814.1.
167. Orange surfaces, thick black core; abundant medium dark grit, rare medium-coarse chaff temper. Rim dm 31 cm. Locus 15. C.2386.
168. Red to brown burnished exterior, brown interior, thick black core; common coarse-medium chaff, medium dark grit temper. Rim dm 21 cm. Locus 6 NW corner near bench. C.277.9.
169. Orange-pink surfaces, black core; abundant fine-medium dark grit temper. Rim dm 22 cm. Locus 22 NW corner. C.2811.1.
170. Dark brown surfaces, black core abundant fine-medium dark grit temper. Rim dm 19 cm. Locus 12. C.2851.
171. Orange-brown burnished surface, brown core; frequent fine-medium dark grit temper. Rim dm 22 cm. Locus 11. C.1926.1.
172. Brown to grey surfaces, grey core; common sand temper. Rim dm 10 cm. Locus 6 NW corner near bench. C.277.10.
173. Orange-brown burnished surfaces with sooted areas, brown interior, thin grey core with red-brown margins. Frequent fine-medium sand and dark grit temper. Rim dm 15 cm. Locus 12 between *tannurs*. C.2864.2.



174. Orange to black surfaces, black core; abundant fine-medium dark grit, common medium chaff temper. Rim dm 16.5 cm. Locus 12 between *tannurs*. C.2864.1.

*Figure 29. Miniature and miscellaneous vessels from Hamoukar Area H. Scale 1:4.*

175. Orange surfaces and core; occasional medium chaff temper. Traces of red-brown paint on exterior. Rim dm 3.2 cm. Locus 6 SW corner. C.2375.
176. Brown surfaces; occasional fine-medium chaff temper. Intact. Rim dm 4.7 cm. Locus 6 SE corner. C.287.
177. Yellow smoothed surfaces; fine sandy fabric with occasional fine-medium chaff temper. Intact. Rim dm 5.8 cm. Locus 17 NW corner. C.1717.
178. Pale grey surface with light horizontal burnishing, grey core; common fine lime temper. Rim dm 5.5 cm. Locus 19. C.1742.
179. Pale grey surfaces and core; occasional medium chaff and fine lime temper. Intact. Rim dm 5.5 cm. Locus 6 SE corner. C.290.
180. Black slip on orange-buff surface; common fine-medium chaff. Complete. Rim dm 6.3 cm. Locus 5 burial 1. C.3294.
181. Yellow streaked surface, blue-grey core; no visible temper. Stoneware; intact. Rim dm 4.0 cm. Locus 6 SE corner. C.289.
182. Orange surfaces and core; common fine-medium chaff temper. Rim dm 4.3 cm. Locus 11. C.1449.
183. Yellow-green surfaces, pink core; occasional medium chaff and fine-medium lime temper. Rim dm 3.5 cm. Locus 11. C.1909.3.
184. Black painted exterior surface; occasional-common medium chaff temper. Intact. Rim dm 3.9 cm. Locus 25. C.2888.
185. Yellow surfaces and core; common fine-medium chaff temper. Rim dm 6.0 cm; base dm 3.8 cm. Locus 25. C.2371.
186. Yellow surfaces and core; common fine-medium chaff temper. Rim dm 6.0 cm. Locus 6. C.1418.
187. Orange-buff surfaces; common fine-medium chaff temper. Intact. Rim dm 4.8 cm. Locus 6. C.1413.
188. Buff surfaces; occasional-common fine chaff temper. Intact. Rim dm 4.0 cm. Locus 6 SW corner. C.272.
189. Yellow surfaces; fine sandy fabric. Intact. Rim dm 4.0 cm. Locus 6. C.288.
190. Yellow-buff surfaces, buff core; common medium chaff temper. Rough irregular base. Rim dm 8.0 cm; base dm 5 cm. Locus 15. C.1736.
191. Yellow slipped (?) surfaces, orange-pink core; occasional medium lime temper. Spiral grooving around vessel, from coil manufacture. Rim dm 12.1 cm; base dm 9.3 cm. Locus 14. C.1974.
192. No description available. Locus 21 near S section. C.2380.
193. Orange to brown surfaces, orange core; abundant fine dark grit and fine lime temper. Applied handle. Edge dm 18.8 cm. Locus 21. C.2376.1.
194. Fire-blackened underside, brown-buff top side, black core; abundant coarse chaff and medium dark grit temper. Uneven applied handle. Edge dm 14.6 cm. Locus 12. C.1713.1.

### *Bibliography*

- Archi, A. and M. G. Biga. 2003. A Victory over Mari and the Fall of Ebla. *Journal of Cuneiform Studies* 55: 1–44.
- Bluard, C., I. Poinot and P. Quenet. 1997. “Un quartier d’occupation d’époque dynastique archaïque (Chantier B)”, in *Tell Beydar, Three Seasons of Excavations (1992–1994): A Preliminary Report*. Subartu 3. Edited by M. Lebeau and A. Suleiman, pp. 47–58. Turnhout: Brepols.
- Chavalas, M. W. 1988. The House of Puzurum: A Stratigraphic, Distributional, and Social Analysis of Domestic Architecture from Tell Ashara/Terqa, Syria, from the Middle of the Second Millennium BC. PhD dissertation, University of California at Los Angeles.
- Colantoni, C. 2005. Traces of Tradition: Northern Mesopotamian Urbanism from the Late 3rd through Early 2nd Millennium BC. PhD dissertation, University of Cambridge.
- Delougaz, P., D. H. Hill and S. Lloyd. 1967. *Private Houses and Graves in the Diyala Region*. Oriental Institute Publications 88. Chicago: University of Chicago Press.

- Emberling, G. and H. McDonald. 2001. Excavations at Tell Brak 2000: Preliminary Report. *Iraq* 63: 21–54.
- Gibson, M., A. al-Azm, C. Reichel, S. Quntar, J. A. Franke, L. Khalidi, C. Hritz, M. Altaweel, C. Coyle, C. Colantoni, J. Tenney, G. Abdul Aziz and T. Hartnell. 2002a. Hamoukar: A Summary of Three Seasons of Excavation. *Akkadica* 123: 11–34.
- Gibson, M., M. Maktash, J. A. Franke, A. al-Azm, J. C. Sanders, T. J. Wilkinson, C. Reichel, J. A. Ur, P. Sanders, A. Salameh, C. Hritz, B. Watkins and M. Kattab. 2002b. First Season of Syrian-American Investigations at Hamoukar, Hasekeh Province. *Iraq* 64: 45–68.
- Henrickson, E. F. 1981. Non-Religious Settlement Patterning in the Late Early Dynastic of the Diyala Region. *Mesopotamia* 16: 43–140.
- Kepinski-Lecomte, C. 1992. “L’architecture”, in *Haradum I. Une ville nouvelle sur le Moyen-Euphrate (XVIIIe-XVIIe siècles av. J.-C.)*. Edited by C. Kepinski-Lecomte, pp. 61–178. Paris: Éditions Recherche sur les Civilisations.
- 1996. “Spatial Occupation of a New Town (Iraqi Middle Euphrates, 18–17th Centuries B.C.)”, in *Houses and Households in Ancient Mesopotamia*. Edited by K. R. Veenhof, pp. 191–96. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- Kolinski, R. 2000. Polish Excavations at Tell Abu Hafur, Area A, Season 1990. *Damaszener Mitteilung* 12: 31–53.
- Lebeau, M. 1993. *Tell Melebiya, cinq campagnes de recherches sur le Moyen Khabour*. Supplément Akkadica IX. Leuven.
- 1996. “Le contexte archéologique et stratigraphique de la ‘Maison aux Tablettes’. Tell Beydar—chantier B—campagnes 1993 et 1994”, in *Administrative Documents from Tell Beydar (Season 1993–1995)*, Subartu II. Edited by F. Ismail, W. Sallaberger, P. Talon and K. Van Lerberghe, pp. 3–15. Turnhout: Brepols.
- 2000. “Stratified Archaeological Evidence and Compared Periodizations in the Syrian Jezirah During the Third Millennium BC”, in *Chronologies des pays du Caucase et de l’Euphrate aux IVe–IIIe millénaires*. Edited by C. Marro and H. Hauptmann, pp. 167–92. Paris: Institut Français d’Études Anatoliennes d’Istanbul.
- Lyonnet, B. 1990. “Prospection archéologique du site de Mohammed Diyab”, in *Tell Mohammed Diyab: Campagnes 1987 et 1988*. Edited by J.-M. Durand, pp. 71–115. Paris.
- Martin, L. and C. Tietze. 1992. Ausgrabungen auf dem Tall Abu Hġaira. *Altorientalische Forschungen* 19: 247–58.
- Matney, T., G. Algaze, S. Rosen, S. Aricanli, and B. Hartenberger. 1999. Early Bronze Age Urban Structure at Titriş Höyük in Southeastern Turkey: The 1998 Season. *Anatolica* 25: 185–201.
- McMahon, A. 1998. The Kuyunjik Gully Sounding, Nineveh, 1989 & 1990 Seasons. *Al-Rāfidān* 19: 1–32.
- McMahon, A. and P. Quenet. 2007. “A Late Third Millennium BC Pottery Assemblage from Chagar Bazar (Area D, Phase II)”, in *Chagar Bazar (Syrie) II: Les vestiges ‘post-akkadiens’ du chantier D et études diverses*. Edited by Ö. Tunca, A. McMahon and A.-M. Baghdo, pp. 69–242. Leuven: Peeters.
- Moortgat-Correns, U. 1983. Tell Chuera in Nordost-Syrien. *Les annales archéologiques arabes syriennes* 33: 207–15.
- Moortgat, A. 1960. *Tell Chuēra in Nordost-Syrien: Vorläufiger Bericht über die zweite Grabungskampagne 1959*. Wiesbaden: Harrassowitz.
- Naroll, R. 1963. Floor Area and Settlement Population. *American Antiquity* 27: 587–89.
- Nicolle, C. 2006. *Tell Mohammed Diyab 3: Travaux de 1992–2000 sur les buttes A et B*. Paris: Éditions Recherche sur les Civilisations.
- Numoto, H. 1988. Excavations at Tell Fisna. *Al-Rāfidān* 9: 1–72.
- Oates, D., J. Oates and H. McDonald. 2001. *Excavations at Tell Brak, Vol. 2: Nagar in the Third Millennium BC*. Cambridge and London: McDonald Institute for Archaeological Research and the British School of Archaeology in Iraq.
- Oates, J. 2001. “The Third Millennium Pottery”, in *Excavations at Tell Brak, Vol. 2: Nagar in the Third Millennium BC*, by D. Oates, J. Oates and H. McDonald, pp. 151–94. Cambridge and London: McDonald Institute for Archaeological Research and the British School of Archaeology in Iraq.
- Orsi, V. 2009. Persistenze e discontinuità nella tradizione ceramica dell’alta Mesopotamia tra la fine del III e l’inizio del II millennio a.C.: Il contributo degli scavi di Tell Barri e Tell Mozan (Siria). PhD dissertation, University of Florence.
- Parrot, A. 1955. Les fouilles de Mari. Dixième campagne (Automne 1954). *Syria* 32: 185–211.
- Pfälzner, P. 1990. “Tell Bderi—the development of a Bronze Age town”, in *The Near East in Antiquity: German Contributions to the Archaeology of Jordan, Palestine, Syria, Lebanon and Egypt*, Vol. 1. Edited by S. Kerner, pp. 63–79. Amman Goethe Institut: Al Kutba.
- 1996. “Activity Areas and the Social Organisation of Third Millennium B.C. Households”, in *Houses and Households in Ancient Mesopotamia*. Edited by K. R. Veenhof, pp. 117–27. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- 2001. *Haus und Haushalt: Wohnformen des dritten Jahrtausends vor Christus in Nordmesopotamien*. Damaszener Forschungen Band 9. Mainz am Rhein: Philipp von Zabern.

- Reade, J. 1971. Tell Taya (1968–9): Summary Report. *Iraq* 33: 87–100.
- Reichel, C. 2009. Beyond the Garden of Eden: Competition and Early Warfare in Northern Syria (4500–3000 B.C.). *Tagungen des Landesmuseums für Vorgeschichte Halle* 2: 17–30.
- Sallaberger, W. 2007. “From Urban Culture to Nomadism: A History of Upper Mesopotamia in the Late Third Millennium”, in *Sociétés humaines et changement climatique à la fin du troisième millénaire: une crise a-t-elle eu lieu en haute Mésopotamie?* Varia Anatolica 19. Edited by C. Kuzucuoğlu and C. Marro, pp. 417–56. Istanbul: Institut Français d’Études Anatoliennes Georges-Dumézil.
- Schneider, G. and M. Daszkiewicz. 2001. “Stone Ware and Ninevite 5: Notes on Composition and Technology of Pottery from Tell Brak”, in *Excavations at Tell Brak, Vol. 2: Nagar in the Third Millennium BC*, by D. Oates, J. Oates and H. McDonald, pp. 194–216. Cambridge and London: McDonald Institute for Archaeological Research and the British School of Archaeology in Iraq.
- Schwartz, G. M. 2007. “Taking the Long View on Collapse: A Syrian Perspective”, in *Sociétés humaines et changement climatique à la fin du troisième millénaire: une crise a-t-elle eu lieu en haute Mésopotamie?* Varia Anatolica 19. Edited by C. Kuzucuoğlu and C. Marro, pp. 45–67. Istanbul: Institut Français d’études anatoliennes Georges-Dumézil.
- Stein, G. J. 2004. “Structural Parameters and Sociocultural Factors in the Economic Organization of North Mesopotamian Urbanism in the Third Millennium BC”, in *Archaeological Perspectives on Political Economies*. Edited by G. M. Feinman and L. M. Nicholas, pp. 61–78. Salt Lake City: University of Utah Press.
- Stone, E. C. 1981. Texts, Architecture and Ethnographic Analogy: Patterns of Residence in Old Babylonian Nippur. *Iraq* 43: 19–34.
- Ur, J. A. 2002a. The Collapse of an Early Urban Center in Northern Mesopotamia: The Case of Tell Hamoukar. *American Schools of Oriental Research Newsletter* 52: 8–9.
- 2002b. Surface Collection and Offsite Studies at Tell Hamoukar, 1999. *Iraq* 64: 15–44.
- 2010a. Cycles of Civilization in Northern Mesopotamia, 4400–2000 BC. *Journal of Archaeological Research* 18: 387–431.
- 2010b. *Urbanism and Cultural Landscapes in Northeastern Syria: The Tell Hamoukar Survey, 1999–2001*. Oriental Institute Publications 137. Chicago: University of Chicago Oriental Institute.
- Ur, J. A. and C. Colantoni. 2010. “The Cycle of Production, Preparation, and Consumption in a Northern Mesopotamian City”, in *Inside Ancient Kitchens: New Directions in the Study of Daily Meals and Feasts*. Edited by E. Klarich, pp. 55–82. Boulder: University Press of Colorado.
- Vallet, R. 1997. “Habuba Kébira sud, approche morphologique de l’habitat”, in *Les maisons dans le syrie antique du IIIe millénaire aux débuts de l’Islam. Pratiques et représentations de l’espace domestique*. Edited by C. Castel, M. Al-Maqdissi and F. Villeneuve, pp. 105–19. Beirut: IFAPO.
- Weiss, H. and M.-A. Courty. 1993. “The Genesis and Collapse of the Akkadian Empire: the Accidental Refraction of Historical Law”, in *Akkad: The First World Empire*. History of the Ancient Near East Studies 5. Edited by M. Liverani, pp. 131–55. Padova: Sargon.
- Wilkinson, T. J. 1994. The Structure and Dynamics of Dry-Farming States in Upper Mesopotamia. *Current Anthropology* 35: 483–520.
- Wilkinson, T. J. and D. J. Tucker. 1995. *Settlement Development in the North Jazira, Iraq*. Warminster: Aris and Phillips Ltd.

Carlo Colantoni  
McDonald Institute for Archaeological Research  
University of Cambridge  
Downing Street  
Cambridge  
CB2 3ER  
cc238@cam.ac.uk

Jason Ur  
Dept of Anthropology  
Harvard University  
Peabody Museum 57F  
11 Divinity Avenue  
Cambridge MA 02138  
U.S.A.  
jasonur@fas.harvard.edu